Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

BASIC ASSESSMENT REPORT

APPENDIX G: DETAILS OF EAP AND EXPERTISE

contents

Appendix G.1	Curriculum Vitae of Technical Advisor and Quality Assurance – Paul Lochner	2
Appendix G.2	Curriculum Vitae of EAP and Project Leader – Minnelise Levendal	8
Appendix G.3	EAP Declaration of Interest	12
Annendix G 4	Curriculum Vitae of Project Manager – Rohaida Ahed	15

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Appendix G.1 Curriculum Vitae of Technical Advisor and Quality Assurance – Paul Lochner

CSIR Phone: +27 21 888 2400 Jan Cilliers Fax: +27 21 888 2693

Street Email:

PO Box 320 plochner@csir.co.za

Stellenbosch 7600 South Africa

Name of firm: CSIR

Name of staff: Paul Lochner

Profession: Environmental Assessment and Management

Position in firm: Manager: CSIR Environmental Management Services

Years' experience: 24 years

Nationality: South African

BIO-SKETCH:

Paul Lochner commenced work at CSIR in 1992, after completing a degree in Civil Engineering and a Masters in Environmental Science, both at the University of Cape Town. His initial work at CSIR focused on sediment dynamics and soft engineering applications in the coastal zone, in particular, beach and dune management. He conducted several shoreline erosion analyses and prepared coastal zone management plans for beaches. He also prepared wetland management plans.

As the market for environmental assessment work grew, he led Environmental Impact Assessments (EIAs), in particular for coastal resort developments and large-scale industrial developments located on the coast; and Environmental Management Plans (EMPs), in particular for wetlands, estuaries and coastal developments. He has also been involved in researching and applying higher-level approaches to environmental assessment and management, such as Strategic Environmental Assessment (SEA). In 1998-1999, he coordinated the SEA research programme within the CSIR, which led to him being a lead author of the Guideline Document for SEA in South Africa, published by CSIR and national Department of Environmental Affairs (DEA) in February 2000.

In 1999 and 2000, he was the project manager for the legal, institutional, policy, financial and socio-economic component of the Cape Action Plan for the Environment ("CAPE"), a large-scale multi-disciplinary study to ensure the sustainable conservation of the Cape Floral Kingdom. This was funded by the Global Environmental Fund (GEF) and prepared for WWF-South Africa. The study required extensive stakeholder interaction, in particular with government institutions, leading to the development of a Strategy and Action Plan for regional conservation.

In July 2003, he was certified as an <u>Environmental Assessment Practitioner</u> by the Interim Certification Board for Environmental Assessment Practitioners of South Africa.

He has authored several <u>guidelines</u> for government. In 2004, he was lead author of the *Overview of IEM* document in the updated Integrated Environmental Management (IEM) Information Series published by national Department of Environmental Affairs and Tourism (DEAT). In 2005, he was part of the CSIR team that prepared the series entitled *Guidelines for involving specialists in EIA processes* for the Western Cape Department of Environmental Affairs and Development Planning (DEADP); and he authored the *Guideline for Environmental Management Plans* published by Western Cape government in 2005. In 2006-2007, he worked closely with the (then) Dept of Minerals and Energy (DME) of South Africa to prepare a Guideline for Scoping, Environmental Impact Assessment and Environmental Management Plans for mining in South Africa.



Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Over the past 20 years has been closely involved with several environmental studies for <u>industrial and port-related projects</u> in Coega Industrial Development Zone (IDZ), near Port Elizabeth. This included the SEA for the establishment of the Coega IDZ in 1996/7, an EIA and EMP for a proposed aluminium smelter in 2002/3, and assistance with environmental permit applications for air, water and waste. At the Coega IDZ and port, he has also conducted environmental assessments for port development, LNG storage and a combined cycle gas turbine power plant, manganese export, rail development, marine pipelines, and wind energy projects.

Since 2009, he has undertaken numerous EIAs for the <u>renewable energy</u> sector, in particular for wind and solar photovoltaic energy projects. In these EIAs, he has been project leader and integrated the specialist findings from a range of specialist disciplines.

He is currently project leader on two <u>Strategic Environmental Assessments</u> (SEAs) that are being undertaken for national DEA. These <u>SEAs</u> are to support the implementation of the Strategic Integrated Projects (SIPs) that are being promoted by the Presidential Infrastructure Coordinating Committee (PICC). The SEA for Wind and Solar Photovoltaic Energy for South Africa is being conducted over 2013-2014, and the SEA for electricity grid infrastructure commenced January 2014.

Since 2009, Paul has been the <u>manager</u> of the Environmental Management Services (EMS) group within CSIR. This group currently consists of approximately 20 environmental assessment practitioners and a group assistant, with offices in Stellenbosch and Durban. EMS focuses on conducting complex environmental studies in challenging environments, such as remote and data poor regions in Africa (e.g. Cameroon, Gabon, Angola, Namibia and Ethiopia). We also specialise in environmental studies for emerging and innovative technologies, drawing on research and applied scientific expertise within CSIR. Our role is to assist in ensuring the sustainability of projects in terms of environmental and social criteria, by providing a range of environmental services that extend across the project lifecycle, from the pre-feasibility stage through to feasibility, commissioning, operations and closure. We provide this service to government, international agencies, private sector and non-government organisations.

EMPLOYMENT TRACK RECORD

The following table presents a sample of the projects that Paul Lochner has been involved in to date:

Completion Date	Project description	Role	Client
In progress	SEA for the identification of Energy Corridors and Development of a Gas Pipeline Network for South Africa	Project leader	Dept. of Environmental Affairs (DEA), DoE and DPE
In progress	SEA for Aquaculture Development in South Africa (marine and freshwater)	Project leader	DEA and DAFF
2015-2017	SEA for the Square Kilometre Array radio-telescope in the Karoo, South Africa	Project leader	DEA and DST
2015-2017	SEA for Shale Gas Development in South Africa	Project co-leader	DEA, DMR, DoE, DST, DWS
2015-2016	SEA for the development of Electrical Grid Infrastructure for South Africa	Project leader	DEA
2016-2017	EIA for the 75 MW x 12 solar photovoltaic energy projects near Dealesville, Free State	Project Leader	Mainstream Renewable Power SA
2014-2015	SEA of planning for the far south Cape Peninsula	Project Leader	City of Cape Town
2013-2015	EIA for the Ishwati Emoyeni 140 MW wind energy project and supporting electrical infrastructure near Murraysburg, Western Cape	Project Leader	Windlab
2013-2015	EIA for the Saldanha marine outfall pipeline	Project Leader	Frontier Saldanha Utilities

Completion Date	Project description	Role	Client
2012-2015	SEA for identification of renewable energy zones for wind and solar PV projects in South Africa	Project leader	DEA
2012-2013	Environmental Screening Study for a desalination plant for the City of Cape Town	Project leader	City of Cape Town 8 WorleyParsons
2012-2013	EIA for LNG Import to the Mossel Bay Gas-to-Liquid refinery (stopped end of Scoping)	Project leader	PetroSA
2012-2013	EIA for the desalination plant for the Saldanha area	Project leader	West Coast District Municipality & WorleyParsons
2012-2013	EIA for the manganese export terminal at the Port of Ngqura and Coega IDZ	Project leader	Transnet
2011 - 2012	EIA for the 100 MW solar photovoltaic project proposed by Mainstream Renewable Power at Blocuso, near Keimoes in the Northern Cape	Project leader	Mainstream Renewable Power
2011 - 2012	EIA for the 100 MW solar photovoltaic project proposed by Mainstream Renewable Power at Roode Kop Farm, near Douglas, in the Northern Cape	Project leader	Mainstream Renewable Power
2011 - 2012	EIA for the 75 MW solar photovoltaic project proposed by Solaire Direct at GlenThorne, near Bloemfontein in the Free State	Project leader	Solaire Direct
2011 - 2012	EIA for the 75 MW solar photovoltaic project proposed by SolaireDirect at Valleydora, near Springfontein in the Free State	Project leader	Solaire Direct
2010-2011	More than 10 Basic Assessments (BAs) for solar photovoltaic projects in the western cape, Northern Cape, Eastern Cape and Free State	Project leader	Various clients including Dutch, German, French and South African companies
2010/2011	EIA for the Langerfontein wind project near Darling, Western Cape.	Project leader	Mr Herman Oelsner Khwe Khoa
2010/2011	EIA for a 100 MW wind project at Zuurbron and a 50 MW wind project Broadlands in the Eastern Cape	Project leader	WindCurrent SA (German-based company)
2010/2011	EIA for the proposed 143 MW Biotherm wind energy project near Swellendam, Western Cape, South Africa	Project leader	Biotherm South Africa (Pty) Ltd
2010/2011	EIA for the proposed InnoWind wind energy projects near Swellendam, Heidelberg, Albertinia and Mossel Bay (totalling approx 210 MW), Western Cape, South Africa	Project leader	InnoWind South Africa (Pty) Ltd
2009/2010	EIA for the proposed Electrawinds wind energy facility of 45-75 MW capacity in the Coega IDZ, Eastern Cape	Project leader	Electrawinds N.V. (Belgium)
2009/2010	EIA for proposed 180 MW Jeffreys Bay wind energy project, Eastern Cape	Project Leader and co-author	Mainstream Renewable Power South Africa
2009/2010	Basic Assessment for the national wind Atlas for South Africa	Project leader	SANERI and SA Wind Energy Programme, Dept of Energy
2009/2010	EIA for the proposed Gecko soda plant, Otjivalunda and Arandis, Namibia (cancelled)	Project leader	Gecko, Namibia
2009-2010	EIA for the proposed desalination plant at Swakopmund, Namibia	Project leader	NamWater, Namibia
2009	EMP for the Operational Phase of the Berg River Dam, Franschoek, South Africa	Project leader and report co-author	TCTA, South Africa
2009/2010 (on hold)	EIA for the proposed crude oil refinery at Coega, South Africa	Project leader and lead author	PetroSA, South Africa
2008	Environmental Risk Review for proposed LNG/CNG import to Mossel Bay, South Africa	Project leader and lead author	PetroSA, South Africa

Completion Date	Project description	Role	Client
2008	Review of the Business Plan for catchment management for the Berg Water Dam Project, Franschhoek, South Africa	Project reviewer and co-author	TCTA, South Africa
2007 - 2010	EIA for proposed Jacobsbaai Tortoise Reserve eco- development, Saldanha, Western Cape	Project Leader and co-author	Jacobsbaai Tortoise Reserve (Pty) Ltd
2007 - 2010	Independent reviewer for the EIA proposed Amanzi lifestyle development, Port Elizabeth	Independent reviewer appointed to advise EAP	Public Process Consultants and Pam Golding
2007 - 2008	EIA for proposed 18 MW Kouga wind energy project, Eastern Cape	Project Leader and co-author	Genesis Eco-Energy (Approved by DEDEA in March 2009)
2007	Review of EIA for the proposed Hanglip Eco- Development, Plettenberg Bay, Western Cape	Co-author of review of EIA, undertaken on behalf of DEADP	Dept of Environmental Affairs & Development Planning, Western Cape
2006-2007	Scoping phase for the EIA for the proposed Coega LNG-to-Power Project at the Port of Ngqura, Coega IDZ	Project Leader and co-author	Eskom and iGas
2006-2007	Guideline for Scoping, Environmental Impact Assessment and Environmental Management Plans for mining in South Africa	Project leader and co-author	Dept of Minerals and Energy (DME), South Africa
2006	Environmental Impact Assessment (EIA) for the extension of the Port of Ngqura, Eastern Cape	Project Leader and co-author	Transnet
2006	Integrating Sustainability Into Strategy: Handbook (Version 1)	Project Leader and co-author	CSIR (STEP research report)
2005	Technology Review for the proposed aluminium smelter at Coega, South Africa	Project Leader and lead author	Alcan, Canada
2005	Environmental and Social Impact Assessment (ESIA) report for the proposed alumina refinery near Sosnogorsk, Komi Republic, Russia	Project manager and co-author	Komi Aluminium, Russia, IFC, EBRD
2005	Guideline for Environmental Management Plans (EMPs) for the Western Cape province, including conducting a training course for provincial government	Author	Dept of Environmental Affairs & Development Planning, Western Cape
2005	Guideline for the review of specialist studies undertaken as part of environmental assessments	Member of Steering Committee and project facilitator	Dept of Environmental Affairs & Development Planning, Western Cape
2004	Review of Strategic Management Plan for Table Mountain National Park (2001-2004)	Reviewer and co- author	South African National Parks
2004	Strategic Needs Assessment Process for mainstreaming sustainable development into business operations	Researcher and co-author	CSIR (internal research)
2004	Environmental Monitoring Committees booklet in the IEM Information Series for DEAT	Contributing author	Department of Environmental Affairs and Tourism (DEAT)
2004	Overview of Integrated Environmental Management (IEM) booklet in the IEM Information Series	Lead author and researcher	DEAT
2003	Environmental Screening Study for gas power station, South Africa	Project Manager and lead author	Eskom, iGas and Shell
2003	Environmental Management Programme (EMP) Framework for the proposed Coega Aluminium	Project Manager and lead author	Pechiney, France

Completion Date	Project description	Role	Client
	Smelter; and assistance with preparing permit and licence applications		
2003	Environmental Management Plan for the Operational Phase of the wetlands and canals at Century City, Cape Town	Project leader and lead author	Century City Property Owners' Association
2002	Environmental Impact Assessment for the proposed Pechiney aluminium smelter at Coega, South Africa	Project Manager and lead author	Pechiney, France
2002 - 2003	Research project: Ecological impact of large-scale groundwater abstraction on the Table Mountain Group aquifer	Project Manager	Water Research Commission
2002	Environmental Management Plan for the Eskom Wind Energy Demonstration Facility in the Western Cape	Co-author	Eskom
2001-2002	Environmental Impact Assessment for the Eskom Wind Energy Demonstration Facility in the Western Cape	Quality control & co-author	Eskom
2001	Environmental Due Diligence study of four strategic oil storage facilities in South Africa	Project manager and co-author	SFF Association
2000	Cape Action Plan for the Environment: a biodiversity Strategy and Action Plan for the Cape Floral Kingdom - legal, institutional, policy, financial and socio-economic component	Project manager and contributing writer	World Wide Fund for Nature (WWF): South Africa
1999	Environmental Management Plan for the establishment phase of the wetlands and canals at Century City, Cape Town	Project manager and lead author	Monex Development Company
1999	Environmental Management Programme for the Thesen Islands development, Knysna	Process design and Co-author	Chris Mulder Associates Inc; Thesen and Co.
1999	Management Plan for the coastal zone between the Eerste and Lourens River, False Bay, South Africa	Project manager and lead author	Heartland Properties and Somchem (a Division of Denel)
1998	Environmental Assessment of the Mozal Matola Terminal Development proposed for the Port of Matola, Maputo, Mozambique	Project manager and author.	SNC-Lavalin-EMS
1998	Strategic Environmental Assessment (SEA) for the Somchem industrial complex at Krantzkop, South Africa	Project manager and co-author	Somchem, a Division of Denel
1997	Strategic Environmental Assessment (SEA) for the proposed Industrial Development Zone and Harbour at Coega, Port Elizabeth, South Africa	SEA project manager and report writer	Coega IDZ Initiative Section 21 Company
1996	Environmental Impact Assessment of Development Scenarios for Thesen Island, Knysna, South Africa	Project manager and report writer	Thesen and Co.
1996	Environmental Impact Assessment of the Management Options for the Blouvlei wetlands, Cape Town	Project manager and report writer	Ilco Homes Ltd (now Monex Ltd)
1995	Environmental Impact Assessment for the Saldanha Steel Project, South Africa	Report writing and management of specialist studies	Saldanha Steel Project
1994	Environmental Impact Assessment for the upgrading of resort facilities on Frégate Island, Seychelles	Member of the project management team, co-author, process facilitator	Schneid Israelite and Partners
1994	Environmental Impact Assessment for exploration drilling in offshore Area 2815, Namibia	Project manager and co-author	Chevron Overseas (Namibia) Limited
1994	Management Plan for the Rietvlei Wetland Reserve, Cape Town	Project manager and lead author	Southern African Nature Foundation (now WWF-SA)

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Completion Date	Project description	Role	Client
1993	Beach management plan for Stilbaai beachfront and dunes, South Africa	Project manager and lead author	Stilbaai Municipality
1993	Beach and dune management plan for Sedgefield for the beach east of the mouth of the Swartvlei estuary	Project manager and lead author	Nel and De Kock Planners, George
1993	Coastal Stability analysis and beach management plan for the Table View coastline north of Blaauwberg Road, Cape Town.	Project manager and lead author	Milnerton Municipality

EMPLOYMENT RECORD

• 1992 to present Involved in coastal engineering studies; and various forms of environmental assessment and management studies. Council for Scientific and Industrial Research - Environmental Management Services (EMS) - Stellenbosch

QUALIFICATIONS/EDUCATION

- M. Phil. Environmental Science (University of Cape Town)
- B.Sc. Civil Engineering (awarded with Honours) (University of Cape Town)

LANGUAGE CAPABILITY

LANGUAGES	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Moderate	Moderate	Moderate

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Appendix G.2 Curriculum Vitae of EAP and Project Leader – Minnelise Levendal

CSIR Jan Cilliers Street PO Box 320 Stellenbosch 7599 South Africa Phone: +27 21 888 2495/2661 Fax: +27 21 888 2693 Email: mlevendal@csir.co.za



Name of firm: CSIR

Name of staff Minnelise Rouchelle-Ann Levendal

Profession: Environmental Assessment Practitioner/Project Manager

Position in firm: Senior Environmental Assessment Practitioner

South African

Years' experience: 18 years

Languages: Afrikaans and English

Affiliation: SACNASP Registered Professional Natural Scientist (Registration Number: 117078)

Biographical sketch

Nationality:

Minnelise has more than 15 years of experience in environmental assessment and management, and is a Senior Environmental Assessment Practitioner (EAP) in the Environmental Management Services (EMS) group of the CSIR in Stellenbosch. She is a Registered Professional Natural Scientist (Registration Number: 117078) with the South African Council for Natural Scientific Professions (SACNASP). Minnelise has experience in the management and integration of various types of environmental assessments in South Africa for various sectors, including renewable energy and industry. Minnelise has undertaken several Environmental Assessments for wind farms and solar PV farms (i.e. EIAs, BAs, and Amendment and Appeal Processes) in the Northern Cape, Western Cape and Eastern Cape. Minnelise is currently the project leader for the Amendment processes for the adjacent Sutherland, Sutherland 2, and Rietrug WEFs, which received positive Environmental Assessments.

A list of projects she had undertaken is provided below.

Education 1998 M.Sc. (Botany), Stellenbosch University

.,,,	moer (20taily), occurrences on our crossly		
1994	B.Sc. (Hons.) (Botany), University of the Western Cape		
1993	B.Sc. (Education), University of the Western Cape		

Employment Record

Name of current employer	Position	From	То
CSIR (Environmental Management Services-EMS);	Senior Environmental Assessment Practitioner	2006	Present
CSIR (Natural Resources and the Environment)	Environmental Researcher	2004	2006
Western Cape Department of	Assistant Director	2003	2004
Environmental Affairs and	Principal Environmental Officer	2002	2003
Development Planning (DEA&DP)	Principal Environmental Officer	2002	2003
	Senior Environmental Officer	2001	2002
	Environmental Officer	1999	2000
University of the Western Cape	Junior Lecturer	1996	1996
Cape Peninsula University of Technology	Junior Lecturer	1995	1995

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Key Courses

- Public Participation in Environmental Authorisation in South Africa: IAIA workshop presented by Tisha Greyling and Erika Du Plessis (2016).
- Environmental Law: Shepstone Wylie Attorneys; Presented by Janice Tooley (2015).
- Sharpening the Tool: New techniques and methods in Environmental Impact Assessment: Sustainable
- Environmental Solutions (Pty) Ltd (2015).
- Effective Skills for Challenging Meetings & Engagements: Conflict Dynamics (2015).
- Science Communication and Working with the Media: Proof Communications/Jive Media Africa (2014).
- Leadership, Innovation and Change Management: University of Stellenbosch (Business School) (2013).
- MS Project: CILLA (2011).
- Project Management I and II: CILLA (2005)
- Social Impact Assessment: IAIA workshop (2002)
- Environmental Law ("The New Environmental Law Course for Environmental Managers): University of Potchefstroom: Center for Environmental Management) (2002).
- Implementing Environmental Management Systems (SABS/ISO 14001:1996): University of Potchefstroom: Center for Environmental Management (2002).
- Conflict Management in Environmental Issues: University of Potchefstroom: Center for Environmental Management) (2001).

Project Experience Record

The following table presents a list of key projects undertaken by Minnelise Levendal at the CSIR to date, as well as the role played in each project:

Environmental Impact Assessment (EIAs) and Basic Assessments (BAs)-including their respective Environmental Management Programmes (EMPRs):

Completion Date	Project description	Role	Client
2019	Amendment Application for the proposed Kuruman Phase 1 Wind Energy Facility near Kuruman in the Northern Cape	Project Leader and EAP	Mulilo Renewable Project Developments (Pty) Ltd
2019	Amendment Application for the proposed Kuruman Phase 2 Wind Energy Facility near Kuruman in the Northern Cape	Project Leader and EAP	Mulilo Renewable Project Developments (Pty Ltd
2019	Substantive Amendment Application for the proposed Kap Vley Wind Energy Facility near Kleinzee in the Northern Cape	Project Leader and EAP	juwi Renewable Energies (Pty) Ltd
2019	Substantive Amendment Application for the proposed Rietrug Wind Energy Facility near Sutherland in the Northern Cape	Project Leader and EAP	South Africa Mainstream Renewable Power Developments (Pty) Ltd
2019	Substantive Amendment Application for the proposed Sutheland Wind Energy Facility near Sutherland in the Northern and Western Cape	Project Leader and EAP	South Africa Mainstream Renewable Power Developments (Pty) Ltd
2019	Substantive Amendment Application for the proposed Sutherland 2 Wind Energy Facility near Sutherland in the Northern Cape	Project Leader and EAP	South Africa Mainstream Renewable Power Developments (Pty) Ltd
2019	BA for the proposed Gromis wind farm near Kleinzee in the Northern Cape	Project Leader and EAP	ENERTRAG South Africa (Pty) Ltd
2019	BA for the proposed Komas wind farm near Kleinzee in the Northern Cape	Project Leader and EAP	ENERTRAG South Africa (Pty) Ltd
2019	BA for the proposed electrical infrastructure for the Gromis wind farm near Kleinzee in the Northern Cape	Project Leader and EAP	ENERTRAG South Africa (Pty) Ltd
2019	BA for the proposed electrical infrastructure for the Komas wind farm near Kleinzee in the Northern Cape	Project Leader and EAP	ENERTRAG South Africa (Pty) Ltd
2018-2019	BA for the proposed Kudusberg WEF near Sutherland in the Northern and Western Cape	Project Leader and EAP	G7 Renewable Energies (Pty) Ltd
2017-2018	EIA for the proposed Kap Vley Wind Energy Facility near Kleinzee in the Northern Cape	Project Leader and EAP	juwi Renewable Energies (Pty) Ltd
2018	BA for the proposed electrical infrastructure to support he proposed Kap Vley Wind Energy Facility near Kleinzee in the Northern Cape	Project Leader and EAP	juwi Renewable Energies (Pty) Ltd
2015-2016	EIA for the Gemsbok Solar Photovoltaic, PV 3 near Kenhardt in the Northern Cape	Project Manager and EAP	Mulilo Renewable Project Developments
2015-2016	EIA for the Gemsbok Solar PV 4 near Kenhardt in the Northern Cape	Project Manager and EAP	Mulilo Renewable Project Developments

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Completion Date	Project description	Role	Client
2015-2016	EIA for the Gemsbok Solar PV 5 near Kenhardt in the Northern Cape	Project Manager and EAP	Mulilo Renewable Project Developments
2015-2016	EIA for the Gemsbok Solar PV 6 near Kenhardt in the Northern Cape	Project Manager and EAP	Mulilo Renewable Project Developments
2015-2016	EIA for the Boven Solar PV 2 near Kenhardt in the Northern Cape	Project Manager and EAP	Mulilo Renewable Project Developments
2015-2016	EIA for the Boven Solar PV 3 near Kenhardt in the Northern Cape	Project Manager and EAP	Mulilo Renewable Project Developments
2015-2016	EIA for the Boven Solar PV 4 near Kenhardt in the Northern Cape	Project Manager and EAP	Mulilo Renewable Project Developments
2010-2011 (EA Granted)	EIA for the proposed Ubuntu wind energy project, Eastern Cape	Project Manager	WKN Windkraft SA
2010-2011 (EA granted)	EIA for the proposed Banna Ba Pifhu wind energy project, Eastern Cape	Project Manager	WKN Windkraft SA
2010-2011 (EA granted)	BA for a powerline for a WEF near Swellendam in the Western Cape	Project Manager	BioTherm Energy (Pty Ltd
2010-2011 (EA Granted)	EIA for a proposed wind farm near Swellendam in the Western Cape	Project Manager	BioTherm Energy (Pty Ltd
2010 (EAs granted)	Basic Assessment for the erection of two wind monitoring masts near Swellendam and Bredasdorp in the Western Cape	Project Manager	BioTherm Energy (Pty Ltd
2010 (complete)	Basic Assessment for the erection of two wind monitoring masts near Jeffrey's Bay in the Eastern Cape	Project Manager	Windcurrent (Pty Ltd
2009-2010 (EAs granted)	Basic Assessment Process for the proposed erection of 10 wind monitoring masts in SA as part of the national wind atlas project	Project Manager	Department of Energy through SANERI; GEF
2009 (EAs granted)	Basic Assessment Report for a proposed boundary wall at the Port of Port Elizabeth, Eastern Cape	Project Manager	Transnet Ltd
Other Environ	mental Assessments, Strategies, Biodiversity Managem	ent Plans Framewor	ks and Reporting tools:
2014-2018	Special Needs and Skills Development Programme	Project Leader	DEA
2013-2014	Development of a National Management Plan and Strategy for Invasive Alien species	Project Manager	DEA
2012-2014	Development of a Biodiversity Management Plan for the African Lion (<i>Panthera leo</i>)	Project Manager	DEA
2010	South Africa's Second National Communication under the United Nations Framework Convention on Climate Change	Project Manager	SANBI
2008	The development of protocols for the monitoring and evaluation of benefits arising from the Working for Water Programme (2008).	Project manager	DEA
2006-2008	Monitoring and Evaluation of aspects of Biodiversity	Project Leader	Internal project awarded through the Young Researchers Fund
2006	Integrated veldfire management in South Africa. An assessment of current conditions and future approaches.	Co- author	Working on Fire
2004-2005	Biodiversity Strategy and Action Plan Wild Coast, Eastern Cape, SA	Co-author	Wilderness Foundation
2005	Western Cape State of the Environment Report: Biodiversity section. (Year One).	Co- author and Project Manager	Department of Environmental Affairs and Development Planning

Awards

- 2008: Best presentation Award at Arid Zone Conference (Northern Cape)
- 2015: CSIR award for Human Capital Development: Special Needs and Skills Development Programme

Conference Presentations and Papers

- **Levendal, M.** (2012). "Challenges in the Environmental Assessment of Renewable Energy Projects in South Africa" In IAIA (Portugal) Conference Proceedings.
- Bowie, M. (néé Levendal) (1998). "Ecophysiological responses of four succulent Karoo species under different temperature and water regimes." In *Arid Zone Conference* (Northern Cape) Conference Proceedings.

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Publications

- Bowie, M. (néé Levendal) and Ward, D. (2004). Water status of the mistletoe Plicosepalus acaciae parasitic on isolated Negev Desert populations of Acacia raddiana differing in level of mortality. Journal of Arid Environments 56: 487-508.
- Wand, S.J.E., Esler, K.J. and Bowie, M.R (2001). Seasonal photosynthetic temperature responses and changes in 13C under varying temperature regimes in leaf-succulent and drought-deciduous shrubs from the Succulent Karoo, South Africa. South African Journal of Botany 67:235-243.
- Bowie, M.R., Wand, S.J.E. and Esler, K.J. (2000). Seasonal gas exchange responses under three different temperature treatments in a leaf-succulent and a droughtdeciduous shrub from the Succulent Karoo. South African Journal of Botany 66:118-123

Language capabilities

	Speaking	Reading	Writing
Afrikaans	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent

Mevenolal

Minnelise Levendal September 2019

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Appendix G.3 EAP Declaration of Interest



DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER, 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

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities, Northern and Western Cape Provinces

Kindly note the following:

- This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
- This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment
 Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the
 Competent Authority. The latest available Departmental templates are available at
 https://www.environment.gov.za/documents/forms.
- A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
- All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
- All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

Departmental Details

Postal address:

Department of Environmental Affairs

Attention: Chief Director: Integrated Environmental Authorisations

Private Bag X447

Pretoria

0001

Physical address:

Department of Environmental Affairs
Attention: Chief Director: Integrated Environmental Authorisations
Environment House

473 Steve Biko Road

Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:

Email: EIAAdmin@environment.gov.za

Details of EAP, Declaration and Undertaking Under Oath

Page 1 of 4

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

1. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP Company Name:	CSIR	SIR .			
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	3	Percentage Procurement recognition	110 %	
EAP name:	Minnelise Levendal				
EAP Qualifications:	MSc (Botany) University of Stellenbosch				
Professional affiliation/registration:	Registered Professional Natural Scientist (Registration Number: 117078) with the South African Council for Natural Scientific Professions (SACNASP)				
Physical address:	11 Jan Celliers Street, Stellen	bosch			
Postal address:	PO Box 320, Stellenbosch				
Postal code:	7599	(Cell: 083	309 8159	
Telephone:	021 888 2495	Fax: 021 888 2693		888 2693	
E-mail:	mlevendal@csir.co.za				

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

RATION BY THE	EAP
---------------	-----

,MINNELISE LEVENDAL	, declare that –

- · I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and
 any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 13 of the Regulations when preparing
 the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that
 reasonably has or may have the potential of influencing any decision to be taken with respect to the application by
 the Competent Authority; and the objectivity of any report, plan or document to be prepared by myself for
 submission to the Competent Authority, unless access to that information is protected by law, in which case it will be
 indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations;
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

Details of EAP, Declaration and Undertaking Under Oath

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

. I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed

Disclosure of Vested Interest (delete whichever is not applicable)			

activity proceeding other than remuneration for work performed in terms of the Regulations;	
• — I have a vested interest in the proposed activity proceeding, such vested interest being:	
·	
Modal	
Signature of the Environmental Assessment Practitioner	
CSIR	
Name of Company:	
26 September 2019	
Date	
3. UNDERTAKING UNDER OATH/ AFFIRMATION	
I, Minnelise Levendal, swear under oath / affirm that all the information sub	mitted or to be
submitted for the purposes of this application is true and correct.	
Mindal	
Signature of the Environmental Assessment Practitioner	
CSIR	
Name of Company	
26 September 2019	
Date	
HESTER VAN GREUNING Commissioner of Oaths	
Signature of the Commissioner of Oaths Chartered HR Professional (CHRP) Member number: 42865591	
2019 09/26 SABPP 11 Jan Celliers Road Stellenbosch Stellenbosch 7600	
Date	

Details of EAP, Declaration and Undertaking Under Oath

Page 3 of 4

Basic Assessment for the Proposed Construction and Operation of Electrical Grid Infrastructure to support the Sutherland, Sutherland 2 and Rietrug Wind Energy Facilities (WEFs), Northern and Western Cape Provinces: DRAFT BASIC ASSESSMENT REPORT

Appendix G.4 Curriculum Vitae of Project Manager – Rohaida Abed

Name of firm CSIR

Name of staff Rohaida Abed

Profession Environmental Assessment Practitioner

Position in firm Senior Environmental Assessment Practitioner

Years' experience 9 years

Nationality South African

Biographical Sketch

Rohaida Abed is an Environmental Assessment Practitioner in the CSIR Environmental Management Services team based in Durban. She has 9 years of experience in the Environmental Management field, and has been involved in various transport infrastructure related projects as an Environmental Control Officer, which included monitoring compliance with Environmental Authorizations and Environmental Management Plans. She has also been conducting Environmental Assessments relating to Port infrastructure, Bulk Liquid Storage facilities and renewable energy in the capacity of Project Manager. She is also part of a team undertaking a Strategic Environmental Assessment (SEA) for the development of a Phased Gas Pipeline and expansion of Electricity Grid Infrastructure (EGI) in South Africa, for the National DEA, DOE, DPE, iGas, Transnet and Eskom.

Registered Professional Natural Scientist (Pr. Sci. Nat.) in Environmental Science (Reg. No: 400247/14) with the South African Council of Natural Scientific Professions.

for Environmental Management)

Education	2005	Bachelor of Science (Environmental Science), UKZN
	2006	Bachelor of Science Honours (Environmental Science), UKZN
	2010	Master of Science (Environmental Science), UKZN

Employment Record	2006 - 2008	University of KwaZulu-Natal (Academic Demonstrator)
	March 2010 - April 2010	EnAq Consulting (Environmental Officer)
	May 2010 - September	Henwood & Nxumalo Consulting Engineers
	2011	(Environmental Scientist)
	October 2011 - to	CSIR (Environmental Assessment Practitioner)
	present	
Short Courses	May 2009	Management of Estuaries in South Africa (Marine and Estuarine Research, FET Water, and Water Research Commission)
	October 2010	Environmental Impact Assessment: A Practical Approach (North West University (Potchefstroom Campus), Centre

Experience record

Date	Project Description	Role	Client
2010 - 2011	The Repair and Rehabilitation of the Umzinto River Bridge Number 823 on the South Coast of KwaZulu-	Environmental Control Officer	KwaZulu-Natal Department of Transport
	Natal		· ·
2010 - 2011	The Construction of the Kwahlongwa Bridge Number	Environmental Control	KwaZulu-Natal
	3257 over the Kwa-Malukaka River on D297 near Umzumbe, South Coast of KwaZulu-Natal	Officer	Department of Transport
2010 - 2011	The Construction of a bridge and approach roads	Environmental Control	KwaZulu-Natal
	across the Indaka River at Eludimbi, within the Msinga	Officer	Department of Transport
	Local Municipality, KwaZulu-Natal		
2010 - 2011	The Extension of the Lion Park Pipeline along the	Environmental Control	Umgeni Water
	P566 and D2173 in the Manyavu area, KwaZulu-Natal	Officer	

Date	Project Description	Role	Client
2010 - 2011	The Construction of a bridge and approach roads across the Tugela River at Thulwane, within the Nkandla Local Municipality, KwaZulu-Natal	Environmental Control Officer	KwaZulu-Natal Department of Transport
2010 - 2011	The Construction of a bridge and approach roads across the Mona River at Nqolotshe, within the Hlabisa and Nongoma Local Municipalities, KwaZulu-Natal	Environmental Control Officer	KwaZulu-Natal Department of Transport
2010 - 2011	The Construction of the Mdloti River Bridge (Northbound) on the R102, within the eThekwini Municipality, KwaZulu-Natal.	Environmental Control Officer	KwaZulu-Natal Department of Transport
2010 - 2011	The Upgrade of the R102 from the Duffs Road Interchange to King Shaka International Airport, within the eThekwini Municipality, KwaZulu-Natal.	Environmental Control Officer	KwaZulu-Natal Department of Transport
2010 - 2011	The Construction of the P701 Provincial Road from Ulundi to Empangeni, KwaZulu-Natal	Environmental Control Officer	KwaZulu-Natal Department of Transport
2010	Environmental Impact Assessment for the construction of a bridge and approach roads across the Mona River at Nqolotshe, within the Hlabisa and Nongoma Local Municipalities, KwaZulu-Natal	Project Assistant	KwaZulu-Natal Department of Transport
2011 - 2014	Environmental Impact Assessment for the proposed Bulk Liquid Storage and Handling Facility in Zone 8 of the Coega IDZ, Port of Ngqura	Project Consultant	Oiltanking Grindrod Calulo (PTY) Ltd
2012 - 2014	Environmental Impact Assessment for the proposed Manganese Export Terminal in Zones 8, 9 and 11 of the Coega IDZ, including the Port of Ngqura, and surrounding area	Project Assistant	Hatch Africa (PTY) Ltd c/o Transnet
2012 - 2014	Basic Assessment for the Provision of Landside Structures and Infrastructure to the Bulk Liquid Storage and Handling Facility in the Port of Ngqura	Project Manager	Eastern Cape Infrastructure Joint Venture c/o Transnet Capital Projects
2013 - 2014	Environmental Impact Assessment for the Provision of Marine Infrastructure, including a General Cargo Berth and Liquid Bulk Berths at the Port of Ngqura	Project Manager	Transnet Capital Projects
2013 - 2016	Basic Assessment for the decommissioning of unused infrastructure at the Port of Ngqura	Project Manager	Transnet Capital Projects
2015	Public Participation Process for the Application for non-substantive Amendment to the Environmental Authorisation for the proposed Landside Structures and Infrastructure to the Bulk Liquid Storage and Handling Facility in the Port of Ngqura	Project Manager	Transnet Capital Projects
2014 - 2016	Basic Assessment for the Proposed Decommissioning and Upgrade of a Bulk Liquid Storage and Handling Facility at Maydon Wharf, Port of Durban, KwaZulu- Natal	Project Manager	Oiltanking Grindrod Calulo Terminals (PTY) Ltd
2015 - ongoing	Environmental Management Plan for the Proposed Construction of a Bulk Liquid Storage and Handling Facility in the Port of Cape Town, Western Cape	Project Manager	Oiltanking Grindrod Calulo Terminals (PTY) Ltd
2015 - 2016	Basic Assessment Process for the Proposed development of three Transmission Lines and electrical infrastructure to connect to the proposed 75 MW Solar PV Facilities (Kenhardt PV 1, PV 2, and PV 3) on the remaining extent of Onder Rugzeer Farm 168, and the remaining extent of Portion 3 of Gemsbok Bult Farm 120, north-east of Kenhardt, Northern Cape.	Project Manager	Scatec Solar SA 163 (PTY) Ltd
2015 - 2016	Scoping and EIA Process for the Proposed development of three 75 MW Solar PV Facilities (Kenhardt PV 1, PV 2, and PV 3) on the remaining extent of Onder Rugzeer Farm 168, north-east of Kenhardt, Northern Cape.	Project Manager	Scatec Solar SA 163 (PTY) Ltd
2015 - 2016	Environmental Impact Assessment Process for the Proposed Construction, Operation and Decommissioning of a Seawater Reverse Osmosis Plant and Associated Infrastructure at Tongaat and Lovu on the KwaZulu-Natal North Coast and South Coast	Project Assistant	Umgeni Water Amanzi
2015 - 2016	EIA for a Gas-To-Power project and associated infrastructure, forming part of the proposed Uyekraal	Project Manager	Mulilo Thermal Developments

Date	Project Description	Role	Client
	Gas-to-Power Development, Saldanha Bay, Western Cape		
2016	Application for the non-substantive Amendment to the Environmental Authorisation for the proposed Bulk Liquid Storage and Handling Facility in Zone 8 of the Coega IDZ, Port of Ngqura	Project Manager	Oiltanking Grindrod Calulo (PTY) Ltd
2016	Application for the non-substantive Amendment to the Environmental Authorisation for the proposed Victoria West Renewable Energy Facility, Northern Cape	Project Manager	South Africa Mainstream Renewable Power Developments (Pty) Ltd
2016	Scoping and EIA Process: Proposed Development of the Teekloof WEF, near Victoria West, Northern Cape.	Project Assistant	South Africa Mainstream Renewable Power Developments (Pty) Ltd
2016	Scoping and EIA Process: Proposed Development of the Platberg WEF, near Victoria West, Northern Cape.	Project Assistant	South Africa Mainstream Renewable Power Developments (Pty) Ltd
2016 - 2017	Screening Assessment for the proposed storage of Dangerous Goods at an existing Storage Terminal at Maydon Wharf, Port of Durban, KwaZulu-Natal	Project Manager	Oiltanking Grindrod Calulo Terminals (PTY) Ltd
2016 - 2017	Basic Assessment Processes: Proposed development of three Distribution Lines and electrical grid infrastructure to connect to the proposed Sutherland WEF, Sutherland 2 WEF and Rietrug WEF to the National Grid, near Sutherland in the Northern and Western Cape	Project Manager	South Africa Mainstream Renewable Power Developments (Pty) Ltd
2017	Application for the non-substantive Amendment to the Environmental Authorisation for the proposed Bulk Liquid Storage and Handling Facility at Maydon Wharf, Port of Durban, KwaZulu-Natal	Project Manager	Oiltanking Grindrod Calulo (PTY) Ltd
2017 - Ongoing	Strategic Environmental Assessment (SEA for a Phased Gas Pipeline Network and expansion of Electricity Grid Infrastructure (EGI) for South Africa	Project Manager	National DEA, DOE, DPE, Transnet, iGas and Eskom
2018	Three Basic Assessment Processes for the proposed development of three transmission Lines and three 115 MW Solar PV Facilities (Vryburg PV 1, PV 2, and PV 3) near Vryburg, North-West.	Project Team Member	Veroniva (Pty) Ltd - Energy Property
2019	Equator Principles Review of the Final EIA Report for the proposed Bulk Liquid Storage and Handling Facility in Zone 8 of the Coega IDZ, Port of Ngqura	Project Manager	Oiltanking Grindrod Calulo (PTY) Ltd

Language capabilities		Speaking	Reading	Writing
	English	Excellent	Excellent	Excellent