Environmental Impact Assessment (EIA) for the proposed construction, operation and decommissioning of the Saldanha Regional Marine Outfall Project of Frontier Saldanha Utilities (Pty) Ltd. at Danger Bay in the Saldanha Bay region

FINAL EIA REPORT

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	A2: Declarations of Independence
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Focus Group Meetings: Attendance Registers and Notes

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Appendix I

Environmental Impact Assessment (EIA) for the proposed construction, operation and decommissioning of the Saldanha Regional Marine Outfall Project of Frontier Saldanha Utilities (Pty) Ltd. at Danger Bay in the Saldanha Bay region

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APPENDIX A

A1: Curriculum Vitae Paul Lochner and Minnelise Levendal
A2: Declarations of Independence

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Frontier Saldanha Utilities (Pty) Ltd (APPLICANT)	15
Dr Andrea Pulfrich (VOL II, APPENDIX A – MARINE ECOLOGY)	16
Nick Helme (VOL II, APPENDIX B – TERRESTRIAL ECOLOGY)	17
Dr Liz Day (Initial study prepared by Dr Liz Day of Freshwater Consulting Group for the EIA for the W	est Coast
Desalination Plant EIA). (VOL II, APPENDIX C – WETLANDS) Study revised by: Luanita van de	r Walt
(CSIR)	18
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Dr Hugo van Zyl (VOL II, APPENDIX F –ECONOMICS)	22

A1: Curriculum Vitae — Paul Lochner and Minnelise Levendal

CSIR PROJECT LEADER – PAUL LOCHNER

CSIR
Jan Cilliers Street
PO Box 320
Stellenbosch 7600
South Africa

Phone: +27 21 888 2400 Fax: +27 21 888 2693 Email: plochner@csir.co.za



Curriculum Vitae

Paul Lochner

Name of firm CSIR

Name of staff Paul Andrew Lochner

Profession Environmental Assessment and Management

Position in firm Project Leader in Environmental Assessment & Management

Date of birth13 June 1969Years with firm21 yearsNationalitySouth African

Biographical 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 and 1999, he coordinated the SEA research programme within the CSIR, and was a lead author of the Guideline Document for SEA in South Africa, published jointly by CSIR and the national Department of Environmental Affairs and Tourism 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 Environmental Assessment Practitioner by the Interim Certification Board for Environmental Assessment Practitioners of South Africa. 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 2004-2005 he was project manager for an Environmental and Social Impact Assessment (ESIA) conducted for a bauxite mine and alumina refinery in the Komi Republic (Russia), prepared in accordance with World Bank and EU policies, guidelines and standards.

In 2004-2005, he was part of the CSIR team that coordinated the preparation of the series of *Guidelines for involving specialists in EIA processes* prepared for the Western Cape Department of Environmental Affairs and Development Planning (DEADP); and authored the *Guideline for Environmental Management Plans* published by the Western Cape government in 2005.

In 2009, he led the EIA for a desalination plant in Namibia, as well as several EIAs for wind energy facilities in South Africa.

Over the past 14 years has been closely involved with several environmental studies for industrial and port-related projects 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, and wind energy projects.

Education

1990	B.Sc. Civil Engineering (awarded	University of Cape
	with Honours)	Town
1992	M. Phil. Environmental Science	University of Cape
		Town

Employment record

January 1992 to June 1992: Completed Masters thesis, working in conjunction with the Environmental Evaluation Unit at the University of Cape Town. The thesis investigated the potential future ecological and socio-economic impacts resulting from the closure of a large diamond mining operation, and developed actions to mitigate these impacts.

October 1992 to present: Employed by the CSIR in Stellenbosch. Involved in coastal engineering studies; and various forms of environmental assessment and management studies. (A track record of experience is listed below).

PROFESSIONAL INVOLVEMENT IN COMMITTEES:

1996/97:	Committee Member of the Western Cape Branch of the International Association for Impact Assessment (IAIA)
1997/98:	Chairperson of the Western Cape Branch of IAIA and member of the national IAIA committee
1998/99:	Committee Member of the Western Cape Branch of IAIA
1996 to present:	Chairperson of the Blouvlei Environmental Committee at Century City, Cape Town (This committee is tasked with overseeing the restoration and management of a wetland in the midst of a new mixed-use urban development)

Experience record

The following table presents an abridged list of projects that Paul Lochner has been involved in, indicating his role in each project:

Completion Date	Project description	Role	Client
2013-in progress	EIA for the proposed importation of Liquefied Natural Gas (LNG) to the Mossel Bay area	Project Leader	PetroSA
2013-in progress	EIA for the proposed Saldanha Regional Marine Outfall Project	Project Leader	Frontier Saldanha Utilities (Pty) Ltd
2012-in progress	SEA for the placement of wind energy projects in SA	Project Leader	National Department of Environmental Affairs
2012-in progress	SEA for the placement of solar energy projects in SA	Project Leader	National Department of Environmental Affairs
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
2012 (in progress)	EIA for the 80 MW solar photovoltaic project by CAMAC on Farm O'Poort near postmasburg.	Project Leader	CAMAC International
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 (in progress)	EIA for the Langerfontein wind project near Darling, Western Cape.	Project Leader	Mr Herman Oelsner, Khwe Khoa
2012-2013	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)
2011	EIA for the proposed 143 MW Biotherm wind energy project near Swellendam, Western	Project Leader	Biotherm South Africa (Pty) Ltd

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Completion Date	Project description	Role	Client
	Cape, South Africa		
2010-2013	EIA for the proposed InnoWind wind energy	Project Leader	InnoWind South Africa (Pty)
(final report	projects near Swellendam, Heidelberg,		Ltd
completed)	Albertinia and Mossel Bay (totalling approx		
	210 MW), Western Cape, South Africa		
2009/2010	EIA for the proposed Electrawinds wind energy	Project Leader	Electrawinds N.V. (Belgium)
(authorisation	facility of 45-75 MW capacity in the Coega IDZ,		
granted by DEA in	Eastern Cape		
Aug 2011			
2009/2010	EIA for proposed 180 MW Jeffreys Bay wind	Project Leader and co-	Mainstream Renewable Powe
(authorisation	energy project, Eastern Cape	author	South Africa
granted by DEA in			
April 2011)			
2009/2010	Basic Assessment for the national wind Atlas	Project Leader	SANERI and SA Wind Energy
(authorisation	for South Africa		Programme, Dept of Energy
granted by DEA)			
2009/2010	EIA for the proposed Gecko soda plant,	Project Leader	Gecko, Namibia
(on hold)	Otjivalunda and Arandis, Namibia		
2009	EIA for the proposed desalination plant at	Project Leader	NamWater, Namibia
	Swakopmund, Namibia		
2009	EMP for the Operational Phase of the Berg	Project Leader and report	TCTA, South Africa
	River Dam, Franschoek, South Africa	co-author	
2009/2010	EIA for the proposed crude oil refinery at	Project Leader and lead	PetroSA, South Africa
(in progress)	Coega, South Africa	author	
2008	Environmental Risk Review for proposed	Project Leader and lead	PetroSA, South Africa
	LNG/CNG import to Mossel Bay, South Africa	author	
2008	Review of the Business Plan for catchment	Project reviewer and co-	TCTA, South Africa
	management for the Berg Water Dam Project,	author	
	Franschhoek, South Africa		
2007 – 2010	EIA for proposed Jacobsbaai Tortoise Reserve	Project Leader and co-	Jacobsbaai Tortoise Reserve
	eco-development, Saldanha, Western Cape	author	(Pty) Ltd
2007 – 2010	Independent reviewer for the EIA proposed	Independent reviewer	Public Process Consultants and
	Amanzi lifestyle development, Port Elizabeth	appointed to advise EAP	Pam Golding
2007 – 2008	EIA for proposed 18 MW Kouga wind energy	Project Leader and co-	Genesis Eco-Energy (Approved
	project, Eastern Cape	author	by DEDEA in March 2009)
2007	Review of EIA for the proposed Hanglip Eco-	Co-author of review of EIA,	Dept of Environmental Affairs
	Development , Plettenberg Bay, Western Cape	undertaken on behalf of	& Development Planning,
		DEADP	Western Cape
2006-2007	Scoping phase for the EIA for the proposed	Project Leader and co-	Eskom and iGas
	Coega LNG-to-Power Project at the Port of	author	
	Ngqura, Coega IDZ		
2006-2007	Guideline for Scoping, Environmental Impact	Project Leader and co-	Dept of Minerals and Energy
	Assessment and Environmental Management	author	(DME), South Africa
	Plans for mining in South Africa		
2006	Environmental Impact Assessment (EIA) for the	Project Leader and co-	Transnet
	extension of the Port of Ngqura, Eastern Cape	author	
2006	Integrating Sustainability Into Strategy: Handbook (Version 1)	Project Leader and co- author	CSIR (STEP research report)
2005	Technology Review for the proposed	Project Leader and lead	Alcan, Canada
	aluminium smelter at Coega, South Africa	author	
2005	Environmental and Social Impact Assessment	Project manager and co-	Komi Aluminium, Russia, IFC,
	(ESIA) report for the proposed alumina refinery	author	EBRD
	near Sosnogorsk, Komi Republic, Russia	addioi	
2005	Guideline for Environmental Management	Author	Dept of Environmental Affairs
2003	Saluenne for Environmental Management	Addioi	Dept of Environmental Arialis

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Completion Date	Project description	Role	Client
	Plans (EMPs) for the Western Cape province, including conducting a training course for		& Development Planning, Western Cape
	provincial government		
2005	Guideline for the review of specialist studies	Member of Steering	Dept of Environmental Affairs
	undertaken as part of environmental	Committee and project	& Development Planning,
	assessments	facilitator	Western Cape
2004	Review of Strategic Management Plan for	Reviewer and co-author	South African National Parks
	Table Mountain National Park (2001-2004)		
2004	Strategic Needs Assessment Process for	Researcher and co-author	CSIR (internal research)
	mainstreaming sustainable development into		
	business operations		
2004	Environmental Monitoring Committees	Contributing author	Department of Environmental
	booklet in the IEM Information Series for DEAT	· ·	Affairs and Tourism (DEAT)
2004	Overview of Integrated Environmental	Lead author and researcher	DEAT
	Management (IEM) booklet in the IEM		
	Information Series		
2003	Environmental Screening Study for gas power	Project Manager and lead	Eskom, iGas and Shell
	station, South Africa	author	
2003	Environmental Management Programme	Project Manager and lead	Pechiney, France
	(EMP) Framework for the proposed Coega	author	
	Aluminium Smelter; and assistance with		
	preparing permit and licence applications		
2003	Environmental Management Plan for the	Project Leader and lead	Century City Property Owners
	Operational Phase of the wetlands and canals at	author	Association
	Century City, Cape Town		
2002	Environmental Impact Assessment for the	Project Manager and lead	Pechiney, France
	proposed Pechiney aluminium smelter at	author	
	Coega, South Africa		
2002 - 2003	Research project: Ecological impact of large-	Project Manager	Water Research Commission
	scale groundwater abstraction on the Table		
	Mountain Group aquifer		
2002	Environmental Management Plan for the	Co-author	Eskom
	Eskom Wind Energy Demonstration Facility in		
2001 2002	the Western Cape	Ovelity control 0 on author	Falsassa
2001-2002	Environmental Impact Assessment for the	Quality control & co-author	Eskom
	Eskom Wind Energy Demonstration Facility in the Western Cape		
2001	Environmental Due Diligence study of four	Project manager and co-	SFF Association
2001	strategic oil storage facilities in South Africa	author	311 Association
2000	Cape Action Plan for the Environment: a	Project manager and	World Wide Fund for Nature
2000	biodiversity Strategy and Action Plan for the	contributing writer	(WWF): South Africa
	Cape Floral Kingdom - legal, institutional, policy,	continuating writer	(11111)1 30 44117 111104
	financial and socio-economic component		
1999	Environmental Management Plan for the	Project manager and lead	Monex Development Compan
	establishment phase of the wetlands and canals	author	, , , , , , , , , , , , , , , , , , , ,
	at Century City, Cape Town		
1999	Environmental Management Programme for	Process design and Co-	Chris Mulder Associates Inc;
	the Thesen Islands development, Knysna	author	Thesen and Co.
1999	Management Plan for the coastal zone	Project manager and lead	Heartland Properties and
	between the Eerste and Lourens River, False	author	Somchem (a Division of Denel
	Bay, South Africa		·
1998	Environmental Assessment of the Mozal	Project manager and author.	SNC-Lavalin-EMS
	Matola Terminal Development proposed for the	=	

Completion Date	Project description	Role	Client
	Port of Matola, Maputo, Mozambique		
1998	Strategic Environmental Assessment (SEA) for	Project manager and co-	Somchem, a Division of Denel
	the Somchem industrial complex at Krantzkop,	author	
	South Africa		
1997	Strategic Environmental Assessment (SEA) for	SEA project manager and	Coega IDZ Initiative Section 21
	the proposed Industrial Development Zone and	report writer	Company
	Harbour at Coega, Port Elizabeth, South Africa		
1996	Environmental Impact Assessment of	Project manager and report	Thesen and Co.
	Development Scenarios for Thesen Island,	writer	
	Knysna, South Africa		
1996	Environmental Impact Assessment of the	Project manager and report	Ilco Homes Ltd (now Monex
	Management Options for the Blouvlei wetlands,	writer	Ltd)
	Cape Town		
1995	Environmental Impact Assessment for the	Report writing and	Saldanha Steel Project
	Saldanha Steel Project, South Africa	management of specialist	
		studies	
1994	Environmental Impact Assessment for the	Member of the project	Schneid Israelite and Partners
	upgrading of resort facilities on Frégate Island,	management team, co-	
	Seychelles	author, process facilitator	
1994	Environmental Impact Assessment for	Project manager and co-	Chevron Overseas (Namibia)
	exploration drilling in offshore Area 2815,	author	Limited
	Namibia		
1994	Management Plan for the Rietvlei Wetland	Project manager and lead	Southern African Nature
	Reserve, Cape Town	author	Foundation (now WWF-SA)
1993	Beach management plan for Stilbaai	Project manager and lead	Stilbaai Municipality
	beachfront and dunes, South Africa	author	
1993	Beach and dune management plan for	Project manager and lead	Nel and De Kock Planners,
	Sedgefield for the beach east of the mouth of	author	George
	the Swartvlei estuary		
1993	Coastal Stability analysis and beach	Project manager and lead	Milnerton Municipality
	management plan for the Table View coastline	author	
	north of Blaauwberg Road, Cape Town		

Publication record

A comprehensive list of publications, book chapters and contract reports is available upon request, with a summary provided below.

Publications in journals, peer reviewed conference proceedings and CSIR internal research reports:

Weaver A, Pope J, Morrison-Saunders A & Lochner P, 2009, Contributing to sustainability as an environmental impact assessment practitioner, *Impact Assessment and Project Appraisal* (IAPA), 26:2, 91-98. (This paper received the IAPA best paper award for 2009).

Lochner P, 2009: Case study - The role of environmental and social screening in informing the conceptual design and planning of large-scale projects in the prefeasibility phase, in DBSA, 2009, What works for us — a South African Country report for tactics, Tools and Methods for Integrating Environment and Development (A South African Case study in partnership with the IIED), pp 37-38, Midrand, South Africa.

Lochner P, Munster F and Burns M, 2006. Integrating Sustainability into Strategy (ISIS): a process to inform sustainability strategies and frameworks, *In:* IAIA South Africa Annual Conference proceedings, South Africa.

Rossouw N and Lochner P, 2006. Environmental Monitoring Committees (EMCs): purpose, function and structure. *In:* IAIA South Africa Annual Conference proceedings, South Africa.

Munster F and Lochner P, 2006, Integrating Sustainability Into Strategy: Handbook (Version 1) – describing a process to inform sustainability strategies, frameworks and reports, *CSIR Report ENV-S-I 2005-001*, ISBN 0-7988-5560-6, Stellenbosch.

Van Zyl H, de Wit M, Munster F, Lochner P, Gerber G, 2005. Economics in Environmental Impact Assessment: demystifying the theory and practice, *In:* Conference Proceedings of the IAIA South Africa 2005 Annual National Conference. South Africa.

Lochner P, Weaver A, Gelderblom C, Peart R, Sandwith T and Fowkes S, 2003. Aligning the diverse: the development of a biodiversity conservation strategy for the Cape Floristic Region. *Biological Conservation Vol. 112, ISSN:* 0006-3207.

Lochner P, Münster F, Msutu M, Wren S, 2003. The role of stakeholder engagement in the EIA for the Coega Aluminium Smelter. *In:* Conference Proceedings of the IAIA South Africa 2003 Annual National Conference. ISBN 1-919891-04-8. South Africa.

Lochner P, Brooks W, Pesch P & Münster M. 2003, Stakeholder engagement process in the EIA of an aluminium smelter, Published in *Light Metals* 2003 (Ed. Paul Crepeau), Published by TMS (the Minerals, Metals & Materials Society), ISBN Number 0-87339-531-X, USA.

Rossouw N, Audouin M, Lochner P, Heather-Clark S and Wiseman K, 2000. Development of strategic environmental assessment in South Africa. *Impact Assessment and Project Appraisal*. Vol 18, no. 3, pp 217-223. United Kingdom.

Lochner P and Fowkes S, 2000. Building partnerships for the conservation of the biodiversity of the Cape Floral Kingdom: experiences and lessons learnt from the Cape Action Plan for the Environment. *In:* IAIA-SA Conference Proceedings 2000. South Africa.

Lochner P and Rossouw N, 1997. The development of an Environmental Management Plan for incorporating a wetland into a large mixed use development: the Century City example. *In*: IAIA-SA Conference Proceedings 1997. South Africa.

Environmental Impact Assessment (EIA) for the proposed construction, operation and decommissioning of the Saldanha Regional Marine Outfall Project of Frontier Saldanha Utilities (Pty) Ltd. at Danger Bay in the Saldanha Bay region

FINAL EIA REPORT

Language
capability

	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
IsiXhosa	Average	Average	Average

Paul Lochner October 2014

CSIR PROJECT MANAGER - MINNELISE LEVENDAL

Curriculum Vitae

Minnelise Levendal

Abbreviated Curriculum Vitae

CSIR Phone: +27 21 888 2400

Jan Cilliers Street Fax: +27 21 888 2693

PO Box 320 Email: mlevendal@csir.co.za

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Postal Address: P O Box 320, Stellenbosch, 7599

Telephone Number: 021-888 2495/2661

 Cell:
 0833098159

 Fax:
 0865051341

e-mail: mlevendal@csir.co.za

EDUCATION

M.Sc. (Botany) Stellenbosch University 1998
 B.Sc. (Hons.) (Botany) University of the Western Cape 1994
 B.Sc. (Education) University of the Western Cape 1993

MEMBERSHIPS:

- International Association for Impact Assessment (IAIA), Western Cape (member of their steering committee from 2001-2003)
- IUCN Commission on Education and Communication (CEC); World Conservation Learning Network (WCLN)
- American Association for the Advancement of Science (AAAS)
- Society of Conservation Biology (SCB)

EMPLOYMENT RECORD:

- 1995: Peninsula Technicon. Lecturer in the Horticulture Department.
- 1996: University of the Western Cape. Lecturer in the Botany Department.
- 1999: University of Stellenbosch. Research assistant in the Botany Department
- (3 months)
- **1999:** Bengurion University (Israel). Research assistant (Working in the Arava valley, Negev Israel; 2 months). Research undertaken was published (see first publication in publication list)
- 1999-2004: Assistant Director at the Department of Environmental Affairs and Development Planning (DEA&DP). Work involved assessing Environmental Impact Assessments and Environmental Management Plans; promoting environmental management and sustainable development.
- **2004 to present:** Employed by the CSIR in Stellenbosch:

- September 2004 May 2008: Biodiversity and Ecosystems Services Group
- May 2008 to present: Environmental Management Services Group (EMS)

PROJECT EXPERIENCE RECORD:

The following table presents a list of projects undertaken at the CSIR as well as the role played in each project:

Completion	Project description	Role	Client
Date			
2013 (in	EIA for the proposed Saldanha Regional Marine	Project	Frontier Saldanha Utilities (Pty) Ltd
progress)	Outfall Project	Manager	
2013 (in	EIA for the proposed Amathole wind farm near	Project	South Africa Mainstream
progress)	Butterworth in the Eastern Cape	Manager	Renewable Power
			Developments (Pty) Ltd
2013	BA for a solar PV project near Humansdorp,	Project	WKN Windcurrent SA (Pty) Ltd
(in progress)	Eastern Cape	Manager	
2013	EIA for the proposed Banna ba pifhu wind energy	Project	WKN Windcurrent SA (Pty) Ltd
(in progress)	project, Eastern Cape	Manager	
2013	BA for wetland crossings near Swellendam	Project	BioTherm Energy (Pty Ltd
(complete)		Manager	
2012	EIA for the proposed Ubuntu wind energy project,	Project	WKN Windcurrent SA (Pty) Ltd
(complete)	Eastern Cape, South Africa	Manager	
2011	EIA for the proposed Excelsior wind farm near	Project	BioTherm Energy (Pty Ltd
(complete)	Swellendam in the Western Cape	Manager	
2010	Basic Assessment for the erection of two wind	Project	BioTherm Energy (Pty Ltd
(complete)	monitoring masts near Swellendam and	Manager	
	Bredasdorp in the Western Cape		
2010	EIA for the erection of two wind monitoring masts	Project	Windcurrent (Pty) Ltd
(complete)	near Jeffrey's Bay in the Eastern Cape	Manager	
2010	Basic Assessment Process for the proposed	Project	Department of Energy and SANERI
(complete)	erection of 10 wind monitoring masts as part of the	Manager	
	national wind atlas project		
2010	South Africa's Second National Communication	Project	SANBI
(complete)	under the United Nations Framework Convention	Manager	
	on Climate Change		
2009	Environmental screening study for two wind farms	Project	WKN Windcurrent SA (Pty) Ltd
(complete)	near Humansdorp and Jeffrey's Bay in the Eastern	Manager	
	Cape		
2009	Basic Assessment Report for a proposed boundary	Project	Transnet Ltd
(complete)	wall at the Port of Port Elizabeth, Eastern Cape	Manager	
. , ,	, ,		
2008	Developing an Invasive Alien Plant Strategy for the	Co-author	Eastern Cape Parks Board
	Wild Coast, Eastern Cape,		
2006-2008	Monitoring and Evaluation of aspects of	Project	Internal project awarded through the
	Biodiversity	Leader	Young Researchers Fund
2006	Integrated veldfire management in South Africa.	Co- author	Working on Fire
,	An assessment of current conditions and future		
	approaches.		
2004-2005	Biodiversity Strategy and Action Plan Wild Coast,	Co-author	Wilderness Foundation
_30003	Eastern Cape, SA	20 0001101	
	20000 oupe, or t	1	1

Completion	Project description	Role	Client
Date			
2005	Western Cape State of the Environment Report:	Project	DEA&DP
	Biodiversity section. (Year One).	Manager	

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 drought-deciduous shrub from the Succulent Karoo. South African Journal of Botany 66:118-123.

LANGUAGES

Language	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

Minnelise Levendal October 2014

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A2: Declarations of Independence

Paul Lochner(CSIR PROJECT LEADER)	14	
Frontier Saldanha Utilities (Pty) Ltd (APPLICANT)	15	
Dr Andrea Pulfrich (VOL II, APPENDIX A – MARINE ECOLOGY)	16	
Nick Helme (VOL II, APPENDIX B – TERRESTRIAL ECOLOGY)	17	
Dr Liz Day (Initial study prepared by Dr Liz Day of Freshwater Consulting Group for the EIA for the West Coast Desalination Plant EIA). (VOL II, APPENDIX C – WETLANDS) Study revised by: Luanita van der Walt (CSIR)	18	
Henry Holland (VOL II, APPENDIX D –VISUAL)	19	
Dr Jayson Orton (VOL II, APPENDIX E – HERITAGE (including Archaeology and Palaeontology))	20	
John Pether (VOL II, APPENDIX E –PALAEONTOLOGY)	21	
Dr Hugo van Zyl (VOL II, APPENDIX F –ECONOMICS)		

Paul Lochner(CSIR PROJECT LEADER)

DECLARATION OF INDEPENDENCE



APPLICATION FOR EIA ENVIRONMENTAL AUTHORISATION

THE INDEPENDENT ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

I, Paul Lochner, as the appointed independent environmental practitioner ("EAP") hereby declare that I:

· act/ed as the independent EAP in this application;

Note: The terms of reference must be attached.

- · regard the information contained in this report to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than
 remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment
 Regulations, 2010 and any specific environmental management Act;
- have and will not have no vested interest in the proposed activity proceeding;
- have disclosed, to the applicant and competent authority, any material information that have
 or may have the potential to influence the decision of the competent authority or the objectivity
 of any report, plan or document required in terms of the NEMA, the Environmental Impact
 Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact
 Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any
 specific environmental management Act, and that failure to comply with these requirements
 may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the application was
 distributed or made available to interested and affected parties and the public and that
 participation by interested and affected parties was facilitated in such a manner that all
 interested and affected parties were provided with a reasonable opportunity to participate and
 to provide comments;
- have ensured that the comments of all interested and affected parties were considered, recorded and submitted to the competent authority in respect of the application;
- have kept a register of all interested and affected parties that participated in the public participation process; and
- have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.
- am aware that a false declaration is an offence in terms of regulation 71 of GN. No. R. 543.

Signature of the environmental assessment practitioner:

CSIR

Name of company:

25 JULY 2013

Date:

Frontier Saldanha Utilities (Pty) Ltd (APPLICANT)

DECLARATION OF INDEPENDENCE

APPLICATION FOR EIA ENVIRONMENTAL AUTHORISATION

DECLARATIONS

THE APPLICANT

I Cyril V. Thomas, in my **personal capacity** or **duly authorised** (please circle the applicable option) by Frontier Saldanha Utilities (Pty) Ltd thereto hereby declare that I:

- · regard the information contained in this form to be true and correct, and
- am fully aware of my responsibilities in terms of the National Environmental Management Act of 1998 ("NEMA") (Act No. 107 of 1998), the Environmental Impact Assessment Regulations ("EIA Regulations") in terms of NEMA (Government Notice No. R. 543 refers), and the relevant specific environmental management Act, and that failure to comply with these requirements may constitute an offence in terms of the environmental legislation;
- appointed the environmental assessment practitioner as indicated above, which meet all the requirements in terms of regulation 17 of GN No. R. 543, to act as the independent environmental assessment practitioner for this application;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the environmental legislation including but not limited to –
 - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
 - costs incurred in respect of the undertaking of any process required in terms of the regulations;
 - o costs in respect of any fee prescribed by the Minister or MEC in respect of the regulations;
 - costs in respect of specialist reviews, if the competent authority decides to recover costs;
 and
 - the provision of security to ensure compliance with the applicable management and mitigation measures;
- am responsible for complying with the conditions that might be attached to any decision(s) issued by the competent authority; and
- hereby indemnify, the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of, inter alia, the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible.
- am aware that a false declaration is an offence in terms of regulation 71 of GN. No. R. 543

Please Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Johnnas.	
Signature of the applicant:	
Frontier Saldanha Utilities (Pty) Ltd Name of company:	
24/7/2013	
Date:	

Dr Andrea Pulfrich (VOL II, APPENDIX A - MARINE ECOLOGY)

DECLARATION OF INDEPENDENCE

This report was prepared by Dr Andrea Pulfrich of Pisces Environmental Services (Pty) Ltd. Established in 1998, Pisces has aquired considerable experience in undertaking specialist environmental impact assessments, baseline and monitoring studies, and Environmental Management Programmes relating to marine diamond mining and dredging, hydrocarbon exploration, harbour expansions and thermal/hypersaline effluents.

Andrea has a BSc (Hons) and MSc degree in Zoology from the University of Cape Town and a PhD in Fisheries Biology from the Institute for Marine Science at the Christian-Albrechts University, Kiel, Germany. She is a registered Environmental Assessment Practitioner and member of the South African Council for Natural Scientific Professions, South African Institute of Ecologists and Environmental Scientists, and International Association of Impact Assessment (South Africa).

This specialist report was compiled as a desktop study on behalf of the CSIR, Stellenbosch for their use in preparing an Environmental Impact Assessment Report and developing an Environmental Management Plan for the proposed construction, operation and decommissioning of the marine outfall pipeline and associated infrastructure for Frontier Saldanha Utilities (Pty) Ltd in the Saldanha Bay Region, Western Cape. The compilation followed a review process of published (peer reviewed) and unpublished literature and the assessment of potential impacts based on proposed activities and identification of impacts (and their mitigation) within the available literature.

I do hereby declare that Pisces Environmental Services (Pty) Ltd is financially and otherwise independent of the Applicants and CSIR.

Dr Andrea Pulfrich

Andrea Pulfrich

Nick Helme (VOL II, APPENDIX B - TERRESTRIAL ECOLOGY)

DECLARATION OF INDEPENDENCE

In terms of Chapter 5 of the National Environmental Management Act of 1998 specialists involved in Impact Assessment processes must declare their independence and include an abbreviated Curriculum Vitae. (See CV on last page of this document).

I, N.A. Helme, do hereby declare that I am financially and otherwise independent of the client and their consultants, and that all opinions expressed in this document are substantially my own.

NA Helme

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Dr Liz Day (Initial study prepared by Dr Liz Day of Freshwater Consulting Group for the EIA for the West Coast Desalination Plant EIA). (VOL II, APPENDIX C – WETLANDS) Study revised by: Luanita van der Walt (CSIR)

DECLARATION OF INDEPENDENCE

Note:

This Declaration of Independence was signed by Dr Liz Day for the undertaking of the Wetland Impact Assessment for the West Coast District Municipality Desalination EIA¹. Luanita van der Walt, a CSIR specialist with a background in biogeochemical landscape functionality, compiled the findings of Dr Day's initial study. No declaration of independence has been provided in terms of Chapter 5 of the NEMA given that Dr Day was not responsible for preparing the SRMO Wetland Impact Assessment.

¹ E, Day. 2012. Wetland Specialist Study as part of the EIA for the proposed construction and operation of a reverse osmosis seawater plant in Saldanha, and associated new infrastructure. The Freshwater Consulting Group, prepared for CSIR.

Henry Holland (VOL II, APPENDIX D -VISUAL)

DECLARATION OF INDEPENDENCE

SPECIALIST DECLARATION

I, | ENZy | OLLANDs the appointed independent specialist hereby declare that I: act/ed as the independent specialist in this application;

acred as the independent specialist in this application,

- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- have and will not have vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that
 have or may have the potential to influence the decision of the competent authority or the
 objectivity of any report, plan or document required in terms of the NEMA, the Environmental
 Impact Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study
 was distributed or made available to interested and affected parties and the public and that
 participation by interested and affected parties was facilitated in such a manner that all interested
 and affected parties were provided with a reasonable opportunity to participate and to provide
 comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the
 application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Signature of the specialist:	W. W.
Name of Company:	
Professional Registration (Incl. number):	
Date:	29 SEPTEMBER 2014

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Dr Jayson Orton (VOL II, APPENDIX E – HERITAGE (including Archaeology and Palaeontology))

DECLARATION OF INDEPENDENCE

SPECIALIST DECLARATION

I, JAYSON ORTON , as the appointed independent specialist hereby declare that I: act/ed as the independent specialist in this application;

- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- have and will not have vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study
 was distributed or made available to interested and affected parties and the public and that
 participation by interested and affected parties was facilitated in such a manner that all interested
 and affected parties were provided with a reasonable opportunity to participate and to provide
 comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the
 application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Signature of the specialist:

Name of Company:

Professional Registration (Incl. number):

Date:

ASHA CONSULTING (PTY) LTD ASAPA CRIM SECTION MEMBER 233 06 OCTOBER 2014

John Pether (VOL II, APPENDIX E -PALAEONTOLOGY)

DECLARATION OF INDEPENDENCE

I ...John Pether....., as the appointed independent specialist hereby declare that I:

- act/ed as the independent specialist in the compilation of the above report;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;
- · have and will not have any vested interest in the proposed activity proceeding;
- have disclosed to the EAP any material information that has or may have the potential to
 influence the decision of the competent authority or the objectivity of any report, plan or
 document required in terms of the NEMA, the Environmental Impact Assessment Regulations,
 2010 and any specific environmental management act;
- have provided the EAP with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543, 2010.

Signature of the specialist

Dr Hugo van Zyl (VOL II, APPENDIX F -ECONOMICS)

DECLARATION OF INDEPENDENCE

I, Dr Hugo Van Zyl, as the appointed independent specialist hereby declare that I: act/ed as the independent specialist in this application;

- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than
 remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment
 Regulations, 2010 and any specific environmental management Act;
- have and will not have vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that
 have or may have the potential to influence the decision of the competent authority or the
 objectivity of any report, plan or document required in terms of the NEMA, the Environmental
 Impact Assessment Regulations, 2010 and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;
- have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Signature of the specialist:	Miss.	
Name of Company:	Independent Economic Researchers	
Professional Registration (Incl. number):	N/A	
Date:	26 September 2014	