

APPENDIX H: DETAILS OF EAP AND EXPERTISE

CEN
Integrated Environmental Management Unit
36 River Road
Walmer
Port Elizabeth
6070
South Africa



Telephone: 041 - 581-2983 / 581-7811

Fax: 0865042549

Email: steenbok@aerosat.co.za / lucille@environmentcen.co.za

Reg No: 1996/032402/23

CURRICULUM VITAE

LUCILLE BEHRENS

| | |
|---------------------|--|
| Name of Firm | CEN Integrated Environmental Management Unit |
| Date of birth | 20 August 1976 |
| Position in Firm | Senior Environmental Scientist |
| Specialisation | Environmental Management |
| Nationality | South African |
| Years of experience | 12 |
| HDI Status | White female, no disabilities |
| Languages | English, Afrikaans |

KEY QUALIFICATIONS

Lucille has 12 years' experience in the Environmental Management field. Lucille has undertaken a number of Environmental Impact Assessments (i.e. Basic Assessments; Scoping and EIA) under the EIA Regulations of 2006 and 2010. Her roles have included being the Environmental Assessment Practitioner (EAP), Assistant EAP, Project Manager and Environmental Scientist for EIA related projects. Her responsibilities have included undertaking environmental assessments, compilation of regulated EIA's (i.e. scoping reports, EIA reports, Basic assessments and EMPs) and incorporating specialists into the EIA team for any required specialist studies. Lucille has also undertaken and been involved with the regulated public participation process required for EIAs.

Her experience in compiling environmental management plans relate to construction, maintenance operations and wildlife management. Lucille has been involved in environmental compliance monitoring and auditing (environmental control officer) on a number of construction sites and borrow pits. She has also gained experience in GIS mapping.

Lucille has also been involved in waste studies and sustainable development projects, for example green procurement, elimination of illegal dumping strategies and water conservation and demand management plan.

EDUCATION

| Qualification | Institution | Year |
|---|------------------------|-------------|
| BSc (Hons) (Environmental Monitoring and Modelling) | UNISA | 2008 |
| BSc (Environmental Management) | UNISA | 2005 |
| BA (Hons) (Criminology) | University of Pretoria | 1998 |
| BA | University of Pretoria | 1997 |

COURSES & CONFERENCES

| Course / Conference | Date |
|--|----------------|
| Management Training Session – Nelson Mandela Metropolitan University: Business School | 2006 |
| The Environment And the Project Cycle | March 2008 |
| Technical and Business Report Writing | March 2009 |
| Institute of Waste Management South Africa – Eastern Cape Mini Conference | August 2009 |
| Project Management, Incl. MS Projects | March 2010 |
| Legal Workshop on the Key Implications of the National Environmental Management: Integrated Coastal Management Act | April 2010 |
| Environmental Awareness and Legal Liability for Management | May 2010 |
| Green Star SA Accredited Professional Course | September 2011 |
| WASTECON | October 2012 |
| Contaminated Land Workshop | February 2013 |
| Water Law in South Africa Workshop | August 2013 |
| Institute of Waste Management of Southern Africa – Eastern Cape Conference: The Green Revolution | September 2013 |
| National Wetlands Indaba | October 2013 |
| IWRM, the NWA, and Water Use Authorisations, focusing on Water Use License Applications – Procedures, Guidelines, IWWMP's and Monitoring, Carin Bosman Sustainable Solutions | September 2014 |

PROFESSIONAL MEMBERSHIP / REGISTRATION

| Institution Name | Membership | Year Joined |
|--|-------------------|-------------|
| International Association of Impact Assessments (South Africa) | Member (No. 2668) | 2010 |

EMPLOYMENT RECORD
August 2013 – Present: CEN IEM Unit

On 1 August 2013, Lucille joined the CEN Integrated Environmental Management Unit as **Senior Environmental Scientist**. Her responsibilities include:

- Project management,
- Environmental Impact Assessments (basic assessment, scoping and EIA and associated public participation),
- Co-ordinating and assessing specialist studies,
- Environmental Management Plans/Programmes,
- Environmental Compliance Monitoring,
- GIS mapping.

July 2007 – July 2013: BKS (Pty) Ltd / AECOM SA (Pty) Ltd

On 1 October 2012 Lucille was appointed as a **Senior Environmental Scientist** for the Infrastructure and Management Sector of BKS in Port Elizabeth after BKS and its subsidiaries rebranded on 1 November 2012 to become AECOM SA (Pty) Ltd. Her responsibilities included:

- Project management, including financial management on projects,
- Environmental Impact Assessments (basic assessment, scoping and EIA and associated public participation),
- Co-ordinating and assessing specialist studies,
- Environmental Management Plans/Programmes,
- Environmental Compliance Monitoring,
- Waste and Sustainability Strategies,
- Business development focusing within the Eastern Cape, KwaZulu Natal.
- GIS mapping.

In 2009, Lucille was promoted to **Senior Environmental Scientist** and was responsible for project management, environmental impact assessments (basic assessment, scoping and

EIA and associated public participation), environmental management plans, environmental compliance monitoring, waste and sustainability strategies within the Eastern Cape.

In 2007, Lucille joined BKS (Pty) Ltd as an **Environmental Scientist**. Her responsibilities included undertaking environmental impact assessments (basic assessment, scoping and EIA and associated public participation), compiling environmental management plans and undertaking environmental compliance monitoring.

August 2000 – June 2007: Shamwari Game Reserve (Mantis Collection)

Lucille was the **Wildlife / Environmental Co-Ordinator** for Shamwari Game Reserve (Mantis Collection) from November 2003 – June 2007. During this time, her responsibilities included the following:

Compiling environmental management plans for construction operations and wildlife management for reserves in South Africa, United Arab Emirates and Morocco. Undertaking environmental compliance monitoring of construction sites within game reserves. Monitoring environmental aspects (e.g. water usage) within Mantis game reserves and organising related wildlife permits.

In November 2001, Lucille transferred to the Wildlife Department as the PA to the Wildlife Director.

In 2000, Lucille joined Shamwari Game Reserve and during this time her roles included Personal Assistant to the General Manager, Switchboard Operator and Reservationist.

June 1999 – July 2000: Formax

Computer room supervisor, Data Capturer

1997: University of Pretoria

Practical Tutor, Information Science Department

EXPERIENCE RECORD – SELECTED PROJECTS

ENVIRONMENTAL IMPACT ASSESSMENTS:

- Basic Assessment for the Proposed Coega Kop Wellfield and Water Treatment Works – *NMBM*
- Basic Assessment for the Proposed Recreational Water Park in Uitenhage - *Ntlangani Group of Companies*
- Scoping and EIA for the Proposed Kei Road Water Treatment Works and Conveyance – *Aurecon*
- Basic Assessment for the Upgrading of the Emsengeni Access Road, Kirkwood – *LA Consulting Engineers*
- Basic Assessment for the Proposed Stormwater Management Infrastructure in Colchester, Nelson Mandela Bay Municipality - *NMBM*
- Basic Assessment for the Proposed Hydro Power projects in Somerset East - *Navitas*
- Basic Assessment for the Proposed Alexandria Community Health Centre - *Archworxs*
- Scoping & Environmental Impact Assessment for the Kei Road Water Conveyance (pipeline and water treatment works) - *Aurecon*
- Basic Assessment for the St Francis Stormwater Upgrade - *Aurecon*
- Basic Assessment for the Patensie Prison WasteWater Treatment Works - *Aurecon*
- Basic Assessment for the Proposed SACE Ranger PV Plant, Uitenhage – *SACE*.
- Basic Assessment of the Proposed Clearing of Vegetation for Fence Construction at SAPS Training Institute, Addo, Sundays River Valley Municipality – *Engineering Advice & Services*.
- Basic Assessment for Construction and Operation of a Filling Station with Rest and Retail Facilities, an Agri-Business Retail / Wholesale Facility adjacent to the Nanaga Farm Stall on the Remainder of Portion 8 Nanaga Hoogte No 229, Sundays River Valley Municipality – *Pantheon Trust*

- Scoping and EIA, and Water Use Licence Application for the Proposed Malabar Phase 2 Extension 6 Housing Development - *NMBM*
- Basic Assessment and Water Use Licence Applications for Proposed Gqunu Village Bridge Crossing and Road Upgrades - *Department of Land Reform and Rural Development*.
- Scoping and Environmental Impact Assessment (Environmental Authorisation and Waste Management Licence) for a proposed private GLB+ Waste Disposal Facilities in Springs– *Vereeniging Refractories*

ENVIRONMENTAL MANAGEMENT PROGRAMMES:

- Coastal Management Programme for the Nelson Mandela Bay Municipality
- Environmental Management Programme for Existing Gravel Borrow Pits for Routine Road Maintenance - *EC Department of Roads & Public Works*
- Environmental Management Plan: Port Elizabeth Airport Storm Water – *ACSA*
- Borrow Pit / Quarry Authorisation Application: Elandsdrift Dam - *Department of Water Affairs*

ENVIRONMENTAL COMPLIANCE MONITORING:

- Environmental Control Officer: Construction of the Kuyga Rising Main – *Hatch Goba*
- Environmental Control Officer: Upgrading of Access Roads in Moses Mabida, Kirkwood – *LA Consulting Engineers*
- Environmental Control Officer: Upgrading of Stormwater Infrastructure in Summerstrand – *Hatch Goba*
- Environmental Control Officer: Upgrading of Roads and Stormwater in Nomathamsanqa, Addo – *LA Consulting Engineers*
- Environmental Control Officer: Fonteins Hoek Quarry For The Upgrading Of The Elandsdrift Barrage - *Department of Water Affairs*
- Environmental Control Officer: Rehabilitation of the Churchill Pipeline at the Van Stadens River Mouth, Phase 2 - *Nelson Mandela Bay Municipality*
- Environmental Control Officer: Construction of Recreational Facilities for Van Der Kemp's Kloof Nature Reserve - *Nelson Mandela Bay Municipality*
- Environmental Control Officer: Upgrading of Gravel Roads and Stormwater in Cluster E – *Letsunyane Associates*
- Performance Assessment of 9 Borrow Pits in the Kouga Local Municipality - *Cacadu District Municipality*

SUSTAINABILITY PROJECTS:

- Environmental Screening Assessment for Portion 62 of Ongegunde Vryheid No 746, St Francis – *Aurecon*
- Water Conservation and Demand Management Plan for the Dube TradePort, including King Shaka International Airport – *Dube TradePort*
- Environmental Management System for the Nelson Mandela Bay Municipality 2010 Multi-Purpose Stadium – *Nelson Mandela Bay Municipality*
- Strategy for the Elimination of Illegal Dumping and Maintenance of Municipal Land - *Nelson Mandela Bay Municipality*
- Green Procurement Plan for the Nelson Mandela Bay Municipality - *Nelson Mandela Bay Municipality*
- Helenvale Waste Study - *Cabitech Project Managers*

Michael Cohen

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36 River Road
Walmer, Port Elizabeth. 6070

Telephone: (+27) 041-581-2983
Facsimile: 086 504 2549
E-mail: steenbok@aerosat.co.za

Date of Birth:

18 January 1945

Nationality:

South African

Languages:

English (mother tongue), Afrikaans (good)

Qualifications:

B.Sc. (Zoology, Psychology. Wits. RSA).
B.Sc. (Hons) (Wildlife Management. U Pretoria).
M.Ag. (Wildlife and Fisheries Ecology: Texas A&M). (1973)
D.Sc. (Wildlife Management. U Pretoria). (1988)

Institutions:

South African Council of Natural Scientists (SACNAS)
Professional Member - Institute of Ecologists and Environmental Scientists

Member - International Association for Impact Assessment - South African Chapter

Member of IUCN Commission on National Parks and Protected Areas. (CNPPA) (1994 -1996)

Member of IUCN World Commission on Protected Areas (1997 – current)

Honorary Member of the Institute of Environment and Recreation Management of Africa 1995

Appointed to the Board of the Institute of Ecologists and Environmental Scientists - April 1997-May 2000

Referee to environmental assessment practitioners applying to the Interim Certification Board for Environmental Assessment Practitioners (ICB) for professional certification (2001 - present)

Appointed to the Council of the Provincial Heritage Resource Authority. Ministry of Sport, Arts and Culture. Province of the Eastern Cape 2003 (Resigned)

Professional History:

May 1996 – Present

Environmental Consultant: CEN Integrated Environmental Management Unit

July 1995 - May 1996

Director: Eastern Cape Nature Conservation. Ministry of Economic Affairs, Environment and Tourism. Left to start own consultancy business

January 1993 - June 1995

Regional Director: Cape Nature Conservation. Eastern Cape Region

October 1985 - December 1992

Deputy Director: Environment. Chief Directorate: Environmental Conservation
Directorate: Environmental Management Department of Environment Affairs

July 1983 - September 1985

Assistant Director: Environment Chief Directorate: Environmental Conservation
Department of Environment Affairs

March 1981 - July 1983

Chief Professional Officer Chief Directorate: Environmental Conservation Department of
Environment Affairs

June 1978 - February 1981

Regional Ecologist: Transvaal Nature Conservation Division: Eastern Region (TPA)

August 1976 - May 1978

Officer-in-Charge. Suikerbosrand Nature Reserve Transvaal Nature Conservation
Division (TPA)

1972 - July 1976

Research Assistant Eugene Marais Chair of Wildlife Management University of Pretoria

Specialist Courses:

- ✿ 1993 Completed the certificate course in Public Management at the University of Pretoria. The certificate was awarded Cum Laude
- ✿ 1989 Completed course in Practical Techniques in Environmental Impact Assessment conducted by the Environmental Evaluation Unit at the Graduate School of Business, University of Cape Town
- ✿ 1973 Completed the International Seminar on the Administration of National Parks and Equivalent Reserves held in the United States, Canada and Mexico
- ✿ 1973 Completed short course in Tropical Ecology while at Texas A & M University

International Experience:

- ✿ Nominated as a member of an international team to evaluate the professional

activities of the Nature and National Parks Protection Authority of Israel
(Evaluation was to be conducted during November 2000)

- ✿ 1994 - Represent South Africa as Scientific Councillor on the Convention on Migratory Species - Nairobi, Kenya
- ✿ 1994 - Alternate delegate for South Africa at the Conference of the Parties of the Convention on Migratory Species - Nairobi, Kenya
- ✿ 1994 -Member of the negotiations team for the African Eurasian Waterfowl Agreement - Nairobi, Kenya
- ✿ 1993 -Represent South Africa as Scientific Councillor on the Convention on Migratory Species - Bonn, Germany
- ✿ 1992 -Visit to Israel to hold preliminary discussions on a bilateral agreement on Nature and Environmental Conservation
- ✿ 1992 -Participate in the IV World Congress on National Parks and Protected Areas - Caracas - Venezuela - Present two papers at the Congress and participate in numerous working groups on a wide range of protected area issues
- ✿ 1991 - 1995 South African Representative on the Scientific Council for the Convention on Migratory Species
- ✿ 1990 -Visit to England and Israel (met with a variety of nature and environmental conservation organisations) for discussion on joint projects and for discussions on national and regional protected area systems plans
- ✿ 1989 -Member of South African delegation to the XV Antarctic Treaty meeting, Paris
- ✿ 1988 -Delegate to the 17th IUCN General Assembly - Costa Rica
- ✿ 1986 -Seminar on Environmental Education - Israel

Specialisation in Firm:

Integrated Environmental Management, Environmental Impact Assessment, Rural Development, Natural Resource Planning and Management

Recent Experience:

Environmental Impact Assessment:

2006 – To Present - Selected Projects

- ✿ Scoping Exercise for a Proposed Pilot Aquaculture Operation for the Grow-Out of *Penaeus vannamei* Prawn Larvae For Commercial Purposes Within the Coega Industrial Development Zone at Port Elizabeth Eastern Cape Province Ballastrada Trade and Investments (Pty) Ltd, Trading as SeaArk Africa
- ✿ Environmental Management Plan for a Pilot Aquaculture Operation for the Grow-Out of *Litopenaeus vannamei* Prawn Larvae For Commercial Purposes, Coega Industrial Development Zone at Port Elizabeth, Eastern Cape Province
- ✿ Environmental Assessment for a Proposed Interpretive Centre, Day Visitor Site and Boardwalk Trail in the, Baviaanskloof Mega-Reserve Wilderness Foundation
- ✿ Environmental Assessment for a Proposed Residential Development, Remainder of Erf 328 Kabeljous River Jeffrey's Bay
- ✿ Environmental Assessment for the Augmentation of the Jeffrey's Bay Bulk Water Supply System (Pump Station, Supply Mains from Churchill Supply Mains and 5 MI Reservoir)
- ✿ Environmental Assessment for the Proposed Augmentation of the Jeffrey's Bay Main Electrical Substation
- ✿ Environmental Assessment for a Proposed Residential Development, Remainder of Farm Noorsekloof 327, Jeffrey's Bay
- ✿ Environmental Assessment for the Proposed Rezoning and Subdivision of Portion of Portion 8 of the Farm Kabeljous River No. 321, Jeffrey's Bay

- ✿ Sensitivity Assessment for the Subdivision of Portion 1 (Remaining Extent) of the Farm Klein Buffelsfontein No 477/1
- ✿ Environmental Assessment for a Proposed Resort Development, Portion 84 of the Farm De Stades No. 485, Beachview
- ✿ Environmental Assessment for the Rezoning and Subdivision of the Remainder of the Farm Boschkloof No. 896, Division of Humansdorp
- ✿ Environmental Assessment for the Rezoning of Portion B of the Remainder of Farm 428 to “Special Zone Nursery”
- ✿ Environmental Management Programme Report for a Proposed Sand, Clay and Calcrete Mining Operation in the Coega Valley on Portions 1 and 4 of the Farm Welbedachtsfontein, 300, Port Elizabeth
- ✿ Environmental Assessment for Subdivision and Rezoning of Erf 483 Bushman’s River for Residential Development
- ✿ Environmental Assessment for the Rezoning of Farms 328/1, 328/2 and Farm 779, Jeffrey’s Bay, Kabeljouis-on-Sea

2001 – 2004 Selected Projects

- ✿ Environmental Assessment for the Extension of the Tsitsikamma Golf Estate.
- ✿ Environmental Assessment for a Residential Development in Jeffrey’s Bay.
- ✿ Environmental Assessment for a Township Development in Jeffrey’s Bay
- ✿ Environmental Assessment for Luxury Lodges and a Tent camp on the Mkambati Nature Reserve
- ✿ Environmental Assessment for a Boat Launch Facility at Gwe-Gwe, Mkambati Nature Reserve
- ✿ Environmental Assessment for a Boat Launch Facility at Kings Beach Port Elizabeth
- ✿ Environmental Assessment for the Port Elizabeth Golf Course Estate

- ✿ Environmental Assessment for a Resort Development on the Kromme River
- ✿ Environmental Assessment for the Establishment of a Presidential Suite at the Eagles Cragg Lodge, Shamwari Game Reserve
- ✿ Environmental Assessment for the Establishment of a Golfing Estate at the Port Elizabeth Golf Club
- ✿ Environmental Assessment for the Eskom Tsitsikamma 66kV powerline
- ✿ Environmental Assessment for three resorts in the Zuurrberg Area
- ✿ Environmental Assessment for a Satellite Resort on the Gorah Concession Area, Addo Elephant National Park
- ✿ Environmental Assessment for the Alicedale Golf Resort Development
- ✿ Environmental Assessment for three lodges on the Lalibella Game Reserve
- ✿ Environmental Assessment for the closure of the Marina Martinique Small Boat Harbour
- ✿ Environmental Assessments for two caravan parks on the Gamtoos River
- ✿ Environmental Assessment for the upgrading of the Road from Flagstaff to Holy Cross
- ✿ Biophysical Environmental Assessment on the proposed ESKOM Power line to feed the Aluminium Smelter at Coega
- ✿ Environmental Assessment of the Bayethe Game Reserve
- ✿ Environmental Assessment of Eagles Cragg Game Lodge – Shamwari Game Reserve
- ✿ Environmental Impact Assessment on the Sanderlings Coastal Wetland Resort
- ✿ Scoping Report for boat mooring facilities on the Kromme River to serve a residential resort

- ✿ Class Environmental Assessment for Working for Water projects in terms of the new DWAF Environmental Evaluation System
- ✿ Environmental Scoping for a Housing Development on a Portion of Land in the Van Stadens Wildflower Nature Reserve
- ✿ Environmental Impact Assessment on two Leather Tanneries in Middelburg, Eastern Cape Province
- ✿ Compilation of an Environmental Evaluation System for the Department of Water Affairs and Forestry (DWAF) (Eastern Cape) This environmental evaluation system is currently being incorporated into the national DWAF's Environmental Management System
- ✿ Compilation of an Environmental Evaluation Administration System and Manual for the Department of Water Affairs and Forestry

Natural Resource Management

- ✿ Environmental Management Plan for the King Williamstown - East London National Road
- ✿ Investigation into the Protected Area Estate in the Province of the Eastern Cape: A Review of Goals and Objectives, Strengths and Weaknesses and an Analysis of Various Institutional Structures Suitable for Achieving the Goals and Objectives.
- ✿ Design and run RSA's premier stewardship programme (The South African Natural Heritage Programme and Sites of Conservation Significance Programme)
- ✿ Co-ordinate South African Plan for Nature Conservation
- ✿ Management Plan for the Suikerbosrand Nature Reserve
- ✿ Management Plan for the Marion and Prince Edward Islands (Draft).
- ✿ Protected Area Systems Plan
- ✿ Management Plans for game farmers

- ✿ Bioregional Planning

Policy

- ✿ Arrange and run two DWAF regional information sessions for the DWAF Regional Offices and Provincial Government Departments of the Western and Eastern Cape on the Implementation of the DWAF's (Eastern Cape) Environmental Evaluation System (2001). A further seven provincial workshops will follow.
- ✿ Run five Eastern Cape Information Sessions for District Municipalities in the Eastern Cape Province on the Implementation of the DWAF Environmental Evaluation System (2001)
- ✿ Member DANCED Review Mission on the National Waste Management Strategy
- ✿ Compile South African National Report to the Convention on Biological Diversity
- ✿ Sub-consultant to the Drafting team for the National White Paper on Integrated Pollution Control and Waste Management.
- ✿ Member of a six person drafting team for the National Green Paper on an Environmental Management Policy for South Africa where I represented the nine provinces.
- ✿ Appointed as one of the Reference Group for the National White Paper on an Environmental Management Policy for South Africa.

Papers and Publications:

- ✿ Author and co-author of some 27 papers, reports and conference presentations as well as a number of popular papers on environmental conservation.

Selected Clients

South African

- ✿ Aurecon

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Walmer
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6070
South Africa



Telephone: 041-581-2983 / 581-7811
Email: steenbok@aerosat.co.za

Fax: 0865042549

Reg No: 1996/032402/23

CURRICULUM VITAE: IRMA VAN DER MERWE

Date of Birth: 07 March 1990
Nationality: South African
Languages: Afrikaans & English
Specialisation in Firm: Environmental Impact Assessments, Veld Rehabilitation

Qualifications:

- ✿ BSc (Environmental and Biological Sciences, NWU, 2012)
- ✿ BSc Honours (Ecological Remediation and Sustainable Management, NWU, 2013)
- ✿ MSc (Environmental Science, NWU, 2015)

Professional / Employment History:

August 2016 – Present –Environmental Scientist: CEN Integrated Environmental Management Unit

February 2016 – July 2016 - Personal Assistant to Financial Broker: PSG Graaff-Reinet

March 2015 - September 2015 – Environmental Officer: High Voltage Technology (Pty) Ltd.

2011 – Student Tutor: Undergraduate Soil Science and Geology

Courses, Workshops & Conferences:

- ✿ Section 21(c) and (i) Water Use Training; Department of Water and Sanitation, 2016
- ✿ ISO 14001:2004 Understanding and Implementation of Environmental Management Systems; SABS Training Centre, 2015
- ✿ Third Annual LaRSSA (Land Rehabilitation Society of Southern Africa) conference, 2015.

- ✿ Combined congress presented by the Soil Science Society of South Africa, 2015
- ✿ International Phytotechnology Conference, 2014
- ✿ Second annual LaRSSA conference, 2014
- ✿ Mining and Radiation Course, School of Geo- and Spatial Sciences; North-West University, 2014
- ✿ Soil Remediation Workshop, Agricultural Research Council, 2014
- ✿ First annual LaRSSA conference, 2013
- ✿ Mining and the Environment Course, School of Geo- and Spatial Sciences; North-West University, 2013

APPENDIX I: SPECIALIST'S DECLARATION OF INTEREST



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

File Reference Number:
NEAS Reference Number:
Date Received:

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|-------------------------|
| (For official use only) |
| 12/12/20/ or 12/9/11/L |
| DEA/EIA |
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Application for integrated environmental authorisation and waste management licence in terms of the-

- (1) National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014; and
- (2) National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008) and Government Notice 921, 2013

PROJECT TITLE

| |
|---|
| PROPOSED BEENLEEGTE EMBEDDED SMALL HYDRO PROJECT (SCHOENMAKERS CHUTE) |
| PROPOSED LITTLE FISH EMBEDDED SMALL HYDRO PROJECT (CASCADES CHUTE) |

Specialist:
Contact person:
Postal address:
Postal code:
Telephone:
E-mail:
Professional affiliation(s) (if any)

| | | |
|--|-----------------------|--------------------|
| CEN IEM Unit (Merika Louw) | | |
| Merika Louw | | |
| 4B Shirley Street, Newton Park, Port Elizabeth | | |
| Postal code: | 6065 | Cell: 072 232 4397 |
| Telephone: | 041 364 0728 | Fax: - |
| E-mail: | merika.louw@gmail.com | |
| Professional affiliation(s) (if any) | - | |

Project Consultant:
Contact person:
Postal address:
Postal code:
Telephone:
E-mail:

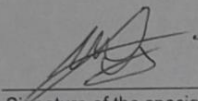
| | | |
|------------------------------|---|--------------------|
| CEN IEM Unit | | |
| Lucille Behrens / Mike Cohen | | |
| 36 River Road, Walmer | | |
| Postal code: | 6070 | Cell: 082 922 1645 |
| Telephone: | 041 581 2983 | Fax: 086 504 2549 |
| E-mail: | lucille@environmentcen.co.za / steenbok@aerosat.co.za | |

4.2 The specialist appointed in terms of the Regulations

1. Merika Louw, declare that --

General declaration:

I act as the independent specialist in this application;
I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
I declare that there are no circumstances that may compromise my objectivity in performing such work;
I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
I will comply with the Act, Regulations and all other applicable legislation;
I have no, and will not engage in, conflicting interests in the undertaking of the activity;
I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
all the particulars furnished by me in this form are true and correct; and
I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



Signature of the specialist:

GEN IEM Unit

Name of company (if applicable):

7/12/2016

Date:

Verify that the above statement was taken by me and that the deponent has acknowledged that he/she knows and understands the contents of this statement. This statement was read and confirmed before me and deponent's signature/mark/thumbprint was placed thereon in my presence.

at Walmer on 2016-12-07 at 14:20

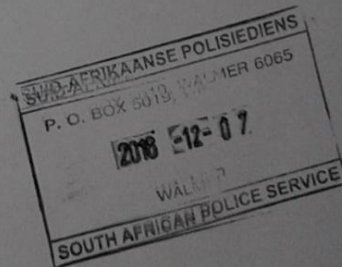
Melanie Colleen Hemmat
(SIGNATURE) COMMISSARIS VAN EDE
(SIGNATURE) COMMISSIONER OF POLICE

Walmer SAPS
VOLLE VOORNAAM EN VAN IN DRUKSKRIEF
FULL FIRST NAME AND SURNAME IN BLOCK LETTERS

120 Main Road
BESIGHEFTADRES (STRAATADRES)
BUSINESS ADDRESS (STREET ADDRESS)

Sgt G
RANK/RANK

BA POLISIEDIENS
BA POLICE SERVICE





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

| | (For official use only) |
|------------------------|-------------------------|
| File Reference Number: | 12/12/20/ or 12/9/11/L |
| NEAS Reference Number: | DEA/EIA |
| Date Received: | |

Application for integrated environmental authorisation and waste management licence in terms of the-

- (1) National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014; and
- (2) National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008) and Government Notice 921, 2013

PROJECT TITLE

PROPOSED BEENLEEGTE EMBEDDED SMALL HYDRO PROJECT (SCHOENMAKERS CHUTE)
PROPOSED LITTLE FISH EMBEDDED SMALL HYDRO PROJECT (CASCADES CHUTE)

| | | | |
|--------------------------------------|---|-------|--------------|
| Specialist: | Anton Bok Aquatic Consultants cc | | |
| Contact person: | Anton H. Bok | | |
| Postal address: | 5 Young Lane, Mill Park, Port Elizabeth | | |
| Postal code: | 6001 | Cell: | 083 4491 801 |
| Telephone: | 041 3733 464 | Fax: | 086 646 4620 |
| E-mail: | antonbok@aquabok.co.za | | |
| Professional affiliation(s) (if any) | Professional Natural Scientist (Registration No. 400406/11), The South African Council for Natural Scientific Professions | | |
| Project Consultant: | CEN IEM Unit | | |
| Contact person: | Lucille Behrens / Mike Cohen | | |
| Postal address: | 36 River Road, Walmer | | |
| Postal code: | 6070 | Cell: | 082 922 1645 |
| Telephone: | 041 581 2983 | Fax: | 086 504 2549 |
| E-mail: | lucille@environmentcen.co.za / steenbok@aerosat.co.za | | |

4.2 The specialist appointed in terms of the Regulations_

Anton Hidde Bok

I, _____, declare that --

General declaration:

I act as the independent specialist in this application;
I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
I declare that there are no circumstances that may compromise my objectivity in performing such work;
I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
I will comply with the Act, Regulations and all other applicable legislation;
I have no, and will not engage in, conflicting interests in the undertaking of the activity;
I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
all the particulars furnished by me in this form are true and correct; and
I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



Signature of the specialist:

Anton Bok Aquatic Consultants cc

Name of company (if applicable):

13 June 2016

Date:



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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DETAILS OF SPECIALIST AND DECLARATION OF INTEREST

| | |
|------------------------|-------------------------|
| | (For official use only) |
| File Reference Number: | 12/12/20/ or 12/9/11/L |
| NEAS Reference Number: | DEA/EIA |
| Date Received: | |

Application for integrated environmental authorisation and waste management licence in terms of the-

- (1) National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014; and
- (2) National Environmental Management Act: Waste Act, 2008 (Act No. 59 of 2008) and Government Notice 921, 2013

PROJECT TITLE

| |
|--|
| PROPOSED BEENLEEGTE EMBEDDED SMALL HYDRO PROJECT (SCHOENMAKERS CHUTE) |
| PROPOSED LITTLE FISH EMBEDDED SMALL HYDRO PROJECT (CASCADES CHUTE) |

| | | | |
|--------------------------------------|---|-------|--------------|
| Specialist: | Dr Johan Binneman | | |
| Contact person: | Mr Kobus Reichert (Eastern Cape Heritage Consultants cc) | | |
| Postal address: | PO Box 689, Jeffreys Bay | | |
| Postal code: | 6330 | Cell: | 072 800 6322 |
| Telephone: | 042 296 0399 | Fax: | 042 2960 399 |
| E-mail: | jnbinneman@gmail.com | | |
| Professional affiliation(s) (if any) | Member of the Association of Southern African Professional Archaeologists (ASAPA) | | |

| | | | |
|---------------------|---|-------|--------------|
| Project Consultant: | CEN IEM Unit | | |
| Contact person: | Lucille Behrens / Mike Cohen | | |
| Postal address: | 36 River Road, Walmer | | |
| Postal code: | 6070 | Cell: | 082 922 1645 |
| Telephone: | 041 581 2983 | Fax: | 086 504 2549 |
| E-mail: | lucille@environmentcen.co.za / steenbok@aerosat.co.za | | |

4.2 The specialist appointed in terms of the Regulations_

I, **J.N.F. Binneman** _____, declare

that -- General declaration:

I act as the independent specialist in this application;
I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
I declare that there are no circumstances that may compromise my objectivity in performing such work;
I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
I will comply with the Act, Regulations and all other applicable legislation;
I have no, and will not engage in, conflicting interests in the undertaking of the activity;
I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
all the particulars furnished by me in this form are true and correct; and
I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



Signature of the specialist:

Eastern cape Heritage consultants cc

Name of company (if applicable):

7 December 2016

Date:

APPENDIX J: ADDITIONAL INFORMATION

APPENDIX J-1: CO-ORDINATES OF LINEAR ROUTES

New Access Road (570m)

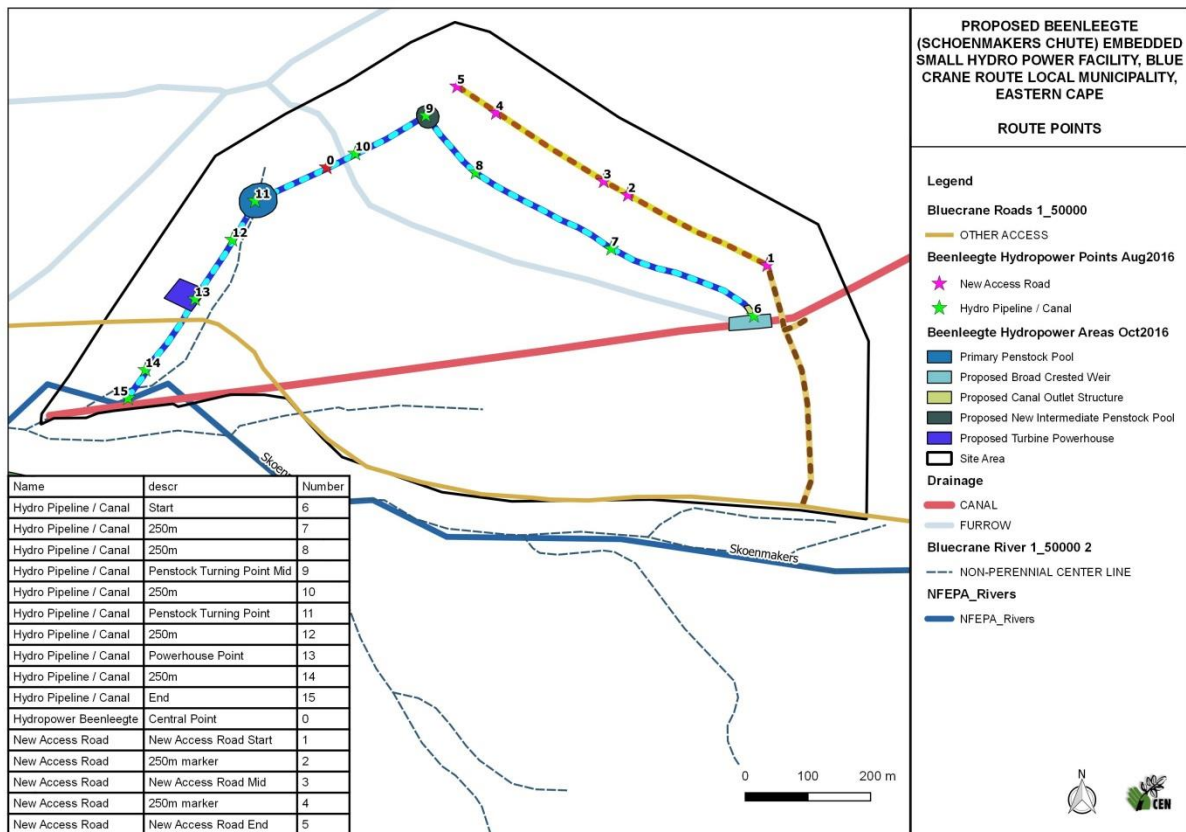
1. Starting point of the activity
2. 250m
3. Middle/Additional point of the activity
4. 250m
5. End point of the activity

| | |
|------------------|------------------|
| 33° 04' 28.12" S | 25° 34' 43.60" E |
| 33° 04' 24.50" S | 25° 34' 35.02" E |
| 33° 04' 23.77" S | 25° 34' 33.52" E |
| 33° 04' 20.28" S | 25° 34' 26.90" E |
| 33° 04' 18.94" S | 25° 34' 24.49" E |

Hydropower Canals / Pipelines (1200m combined length)

6. Starting point of the activity
7. 250m
8. 250m
9. Middle/Additional & Turning Point (at penstock pool)
10. 250m
11. Turning Point (at primary penstock pool)
12. 250m
13. Powerhouse Point
14. 250m
15. End point of the activity

| | |
|------------------|------------------|
| 33° 04' 30.76" S | 25° 34' 42.84" E |
| 33° 04' 27.35" S | 25° 34' 33.94" E |
| 33° 04' 23.41" S | 25° 34' 25.65" E |
| 33° 04' 20.50" S | 25° 34' 22.54" E |
| 33° 04' 22.47" S | 25° 34' 18.26" E |
| 33° 04' 24.93" S | 25° 34' 12.02" E |
| 33° 04' 27.04" S | 25° 34' 10.71" E |
| 33° 04' 30.00" S | 25° 34' 08.39" E |
| 33° 04' 33.69" S | 25° 34' 05.40" E |
| 33° 04' 35.25" S | 25° 34' 04.28" E |



APPENDIX J-2: REFERENCE LIST

BCRM IDP, 2015. Final Integrated Development Plan Review 2015/2016. Blue Crane Route Municipality.

Binneman and Reichert, 2016. A Letter of Recommendation (With Conditions) for the Exemption of a Full Phase 1 Archaeological Impact Assessment for the Proposed Beenleegte Embedded Small Hydro Project in the Blue Crane Route Local Municipality of the Eastern Cape Province. Eastern Cape Heritage Consultants, Jefferys Bay.

Biodiversity Sector Plan for the Blue Crane Route Municipality (2012)

Bok, 2016. Skoenmakers River Chute Hydro Power Project: Aquatic Habitat and Biota Study. Anton Bok Aquatic Consultants, Port Elizabeth.

Cacadu Spatial Development Framework 2013 to 2018 (2013)

Eastern Cape Provincial Biodiversity Conservation Plan (2007)

Eastern Cape Provincial Development Framework (ECPDF, 2014).

ENPAT, 2001. Environmental Potential Atlas for South Africa.

Louw, 2016. Development of the Proposed Beenleegte Embedded Small Hydro Project in the Blue Crane Route Municipality in the Eastern Cape. CEN IEM Unit, Port Elizabeth.