

CURRICULUM VITAE

ASHLEIGH McKENZIE

Proposed position: Environmental Scientist
Name of Staff: Ashleigh McKenzie
Profession: Environmental Scientist
Date of birth: 28 August 1964
Years with firm: 20
Nationality: South African

Membership in Professional Societies:

International Association of Impact Assessment (South African Chapter)

Registered with the South African Council for Natural Scientific Professions (Reg No 400026/05)

Certified as an Environmental Assessment Practitioner with the Interim Certification Board for Environmental Impact Assessment Practitioners of South Africa (from July 2008)

KEY QUALIFICATIONS AND RELEVANT EXPERIENCE

Master of Sciences in Environmental Science, University of Natal, Durban, South Africa (graduated 1998).

Master of Sciences in Genetics, University of Natal, Pietermaritzburg, South Africa (graduated 1991).

Mrs Ashleigh McKenzie has been working in the field of Environmental Management for 20 years and has experience in the application of environmental management tools across a broad range of projects, including Environmental Impact Assessments, Environmental Management Plans and Environmental Compliance Monitoring.

REFERENCES

Mr Frans Kokot Pr Eng, Principal engineer/ Geometric Design/ PDG- KZN, Hatch, South Africa
Tel: +27 (0) 31 536 9400; Mobile: 082 8789348; Email: frans.kokot@hatch.com

Mr Steve Ballot; Founder Member of Environmental Assessment Technologies CC; Tel: 021 851 1098; Mobile: 083 4561486; E-mail: envastec@icon.co.za

Ms Janice Tooley; Janice Tooley Attorneys; Mobile: 083 650 5691; Email: janicetooley11@gmail.com

Ms Vicki King, Metamorphosis Environmental Consultants; Mobile 076 420 1441; Email: vicki@metamorphosisdbn.co.za

PROJECT EXPERIENCE

**Denotes role as a junior/assistant EAP*

*** Denotes role as a main team member but not sole responsibility for the project*

**** Denotes a major role as project manager or a co-team leader, or lead EAP*

TOURISM AND CONSERVATION MANAGEMENT INFRASTRUCTURE IN PROTECTED (CONSERVATION) AREAS AND WORLD HERITAGE SITES

****2000-2008: Greater St Lucia Wetland Park World Heritage Site¹. Environmental Management Programme for Phase 1, 2 3 and 4 Infrastructure Development** [Client: Government of South Africa, Lubombo Spatial Development Initiative: Departments of Trade and Industry, and Environmental Affairs & Tourism; Greater St Lucia Wetland Park Authority²; iSimangaliso Wetland Park Authority]

- Environmental Scoping, Basic Assessments and applications for legal approvals³, for upgrades and construction of Park management and tourism infrastructure including roads, airstrips, bridges, water supply pipelines, reservoirs, electricity supply, solid waste transfer stations, field ranger camps, picnic sites, game viewing hides, game watering holes, coastal dune rehabilitation initiatives, ablution facilities, boardwalks, jetties, park entrance gates and tourism centres within the Greater St Lucia Wetland Park World Heritage Site.
- Development of construction Environmental Management Plans (EMP's) for the above infrastructure projects.
- EMP Compliance Monitoring of construction phase of contracts.

****2000-2007: Greater St Lucia Wetland Park World Heritage Site: Tourism Investment Sites** [Government of South Africa, Lubombo Spatial Development Initiative: Departments of Trade and Industry, and Environmental Affairs & Tourism; Greater St Lucia Wetland Park Authority, iSimangaliso Wetland Park Authority]

- Development of Environmental Code of Conduct and Environmental Guidelines for Tenderers and Concessionaires.
- Development of Environmental Management System (EMS) for the construction and operation phases of tourism activities in the Greater St Lucia Wetland Park.
- Review of Environmental Impact Assessment Documentation submitted for concessioned tourism investment sites, on behalf of the Park Authority.

¹ The Greater St Lucia Wetland Park has been renamed iSimangaliso Wetland Park (effective November 2007).

² The Greater St Lucia Wetland Park Authority has been renamed iSimangaliso Wetland Park Authority (effective November 2007)

³ In terms of the EIA Regulations under Sections 21 and 22 of the Environment Conservation Act 1989 (Act No 73 of 1989) and later in terms of the National Environmental Management Act, 1998 (Act No 107 of 1998). All work done aligned with the requirements of the World Heritage Convention Act, 1999 (Act No 49 of 1999).

- EMP Compliance Monitoring of construction of Thonga Beach Lodge, Mabibi, Greater St Lucia Wetland Park.
- General environmental input provided on behalf of the Park Authority, as required, for development at tourism investment sites within the Greater St Lucia Wetland Park.

*****2002-2007: Construction of new School Building, Enkovukeni Primary School, Enkovukeni Ward, within the Greater St Lucia Wetland Park World Heritage Site:** [Department of Education and Greater St Lucia Wetland Park Authority; iSimangaliso Wetland Park Authority]

Environmental assessment process, compilation of Basic Assessment Report and application for environmental authorisation. Input into permit conditions in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) and Regulations No R1061, 28 October 2005 under Section 86 of the Act.

*****2002-2007: Construction of new School Building, Bhanga Nek Primary School, KwaDapha Ward, within the Greater St Lucia Wetland Park World Heritage Site:** [Department of Education and Greater St Lucia Wetland Park Authority; iSimangaliso Wetland Park Authority]

Environmental assessment process, compilation of Basic Assessment Report and application for environmental authorisation. Input into permit conditions in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) and Regulations No R1061, 28 October 2005 under Section 86 of the Act.

****2002-2015 ongoing: Greater St Lucia Wetland Park World Heritage Site: Buffer Zone Management** [Greater St Lucia Wetland Park Authority; iSimangaliso Wetland Park Authority]

Assistance to the Park Authority in identifying and assessing potential impacts of proposed developments in the Park's Zone of Influence (a Buffer Zone including areas surrounding and affecting the Park), and preparing comment on behalf of the Park Authority on such developments as part of formal EIA and other legal planning processes.

NATURAL RESOURCE MANAGEMENT

1995-1997 MSc Thesis [Natal Town and Regional Planning Commission, Natal Parks Board. Department of Geographical and Environmental Sciences, University of Natal, Durban]

Investigation of the sustainable use of indigenous trees within and surrounding the Thukela Biosphere Reserve, KwaZulu-Natal.

***2001: Community Restoration and Development, Lake Matsamo.** [Komati Basin Water Authority]

- Feasibility study for the mitigation of the loss of medicinal plants due to inundation by Lake Matsamo.
- Feasibility study for the mitigation of the loss of reeds due to inundation by Lake Matsamo.
- Feasibility study for the mitigation of the loss of indigenous wood due to inundation by Lake Matsamo.

***2004: St Lucia Farms. Rehabilitation Plan**

Compilation of rehabilitation plan to restore area cleared of indigenous bush on private farm in Hluhluwe, KwaZulu-Natal

COASTAL MANAGEMENT AND HARBOURS

***1998: Walkway on the coastal dunes at Merewent, South Durban.** [Durban Municipality]

Scoping Report.

****2002: Beach driving and boat launching in the Greater St Lucia Wetland Park.** [Greater St Lucia Wetland Park Authority]

Technical study, environmental assessment and public participation process required in terms of Section 24(7) of the National Environmental Management Act Regulations: Control of Vehicles in the Coastal Zone.

*****2003: Beach driving and boat launching in the Siyaya Coastal Park.** [Ezemvelo KZN Wildlife]

Technical study, environmental assessment and public participation process required in terms of Section 24(7) of the National Environmental Management Act Regulations: Control of Vehicles in the Coastal Zone. Greater St Lucia Wetland Park Authority

****2005/2006: Beach driving and boat launching in the Greater St Lucia Wetland Park: Update Study** [Department of Environmental Affairs and Tourism]

Study to determine changes in ecological and socio-economic conditions in the Greater St Lucia Wetland Park since implementation of the National Environmental Management Act: Regulations for the Control of Vehicles in the Coastal Zone.

***2008: Expansion of Richards Bay Harbour Container Terminal Infrastructure** [Transnet Limited]

Technical Scoping Report.

****2008 - 2012: Re-engineering of Durban Container Terminal, Durban Harbour** [Transnet Limited]

Environmental Investigations and technical reporting as part of a NEMA 24(G) Application for Authorisation (retrospective authorisation).

*****2011 - 2012: Decommissioning of two diesel Pencil Tanks at the Durban Container Terminal, Durban Harbour** [Transnet Limited]

Basic Assessment process and application for Environmental Authorisation

ROADS, BRIDGES, FUEL PIPELINES AND ELECTRICITY LINES (LINEAR DEVELOPMENTS)

***1998: Sasol/Total/Petronet Joint Venture Crude Oil Pipeline from Durban to Vrede.** [Subconsultant to Mark Wood Environmental Consultants.]

Public Involvement aspects of the Environmental Impact Assessment.

***1998: Sasol Gas Pipeline, South Durban.** [Subconsultant to Mark Wood Environmental Consultants]

Public Involvement aspects of the Environmental Impact Assessment.

***1999/2000: Upgrade and tolling of the John Ross Highway, Richards Bay, KZN.** [National Roads Agency]

Scoping Report and application for authorisation.

****2000: Lesotho Road Project.** [Subcontracted by AfriDev Consultants]

Assessment of biophysical impacts on a proposed road from Semonkong to Ha Mosi, Lesotho.

****2000: Realignment of the MR569. Felixton. KZN.** [Bay Stone Sales]

Scoping Report and Application for authorisation.

****2003: Community Restoration and Development, Lake Matsamo, Swaziland.** [Government of Swaziland]

EMP compliance monitoring of construction of rural development infrastructure including schools, roads, bridges, fencing, irrigation schemes, dipping tanks.

****2005: Upgrade of the John Ross Highway, Richards Bay/Empangeni.** [National Roads Agency]

Compilation of EMP for the design, preconstruction, construction, rehabilitation and maintenance phases of the John Ross Highway.

****2007-2008: Phase 3 Upgrade of the John Ross Highway, between the N2 and Grantham Highway, Empangeni.** [KwaZulu-Natal Department of Transport]

Basic Assessment Report and Application for authorisation.

****2009/2010: New Multi-Products Pipeline (NMPP) Electrical Distribution Infrastructure and Above Ground Fuel Storage for Pump Station 1** [Transnet]

Drafting of Scoping Report, Environmental Impact Assessment Report and Environmental Management Plan (EMP) as part of Application for authorisation.

****2009/2010: New Multi-Products Pipeline (NMPP) Electrical Distribution Infrastructure and Above Ground Fuel Storage for Pump Station 3** [Transnet]

Drafting of Scoping Report, Environmental Impact Assessment Report and Environmental Management Plan (EMP) as part of Application for authorisation.

****2009/2010: New Multi-Products Pipeline (NMPP) Electrical Distribution Infrastructure and Above Ground Fuel Storage for Pump Station 5** [Transnet]

Drafting of Scoping Report, Environmental Impact Assessment Report and Environmental Management Plan (EMP) as part of Application for authorisation.

****2010: Proposed Venus-Sigma 765 kV Transmission Power Line, Sigma-Hector 400 kV Transmission Power Lines (x 2), and New feeder bays at Hector Sub-station (x 3) (EIA: 12/12/20/1397/1, EIA: 12/12/20/1397/3 2** [Eskom]

EIA team member assisting with review of specialist studies and integration of specialist findings for the Environmental Impact Assessment.

Compilation of the Environmental Management Plan (EMP) for the design, construction and operation phases of the powerlines.

****2010: Proposed Sigma Substation EIA: 12/12/20/1397/2** [Eskom]

EIA team member assisting with review of specialist studies and integration of specialist findings for the Environmental Impact Assessment.

Compilation of the Environmental Management Plan (EMP) for the design, construction and operation phases of the Sigma Substation.

****2013/2014: Proposed St Faiths 765 kV Sub-Station and Turn-In and Turn-Out Transmission Lines.**[Eskom]

Review of specialist studies and integration of specialist findings for the Environmental Impact Assessment.

Compilation of the Environmental Impact Assessment Report (EIAR) and Environmental Management Plan (EMP) for the design, construction and operation phases of the St Faiths Substation.

*****2015: Proposed Upgrade of the Hammarsdale Interchange, National Route 3 (N3), eThekweni Outer West, KwaZulu-Natal** [South African National Roads Agency]

Application for Environmental Authorisation (Basic Assessment Process) in terms of the National Environmental Management Act (NEMA) EIA Regulations and Application for Water Use Licenses in terms of the National Water Act.

*****2015 – 2019 and ongoing to date: Proposed Upgrade of the N2 and N3 National Routes between Durban and Pietermaritzburg, KwaZulu-Natal** [South African National Roads Agency]

Applications for Environmental Authorisation (Basic Assessment Processes) in terms of the National Environmental Management Act (NEMA) EIA Regulations and Application for Water Use Licenses in terms of the National Water Act for the following national road sections:

BA1: Basic Assessment for the Capacity Upgrades to the N2 (Solomon Mahlangu I/C to south of Umgeni Rd I/C), including expansion of EB Cloete and Solomon Mahlangu Interchanges, and the N3 (EB Cloete to Paradise Valley), including provision of temporary access for construction below Westville and Paradise Valley viaducts. (Completed and Environmental Authorisation issued)

BA2: Basic Assessment for the Capacity Upgrades to the N3 from Paradise Valley to Key Ridge, including provision of temporary access for construction below the uMhlatuzana viaduct. (in progress)

BA3: Basic Assessment for the Proposed Upgrade of the N3 from Hammarsdale to Cato Ridge (in progress)

BA4: Basic Assessment for the Proposed Upgrade of the N3 from Cato Ridge to Lynnfield Park (Completed and Environmental Authorisation issued)

BA5: Basic Assessment for the Proposed Upgrade of the N3 from Lynnfield Park to Murray Road (Completed and Environmental Authorisation issued)

BA6: Basic Assessment for the Proposed Upgrade of the N3 from New England Road IC to Twickenham Road (still in progress)

WATER SECTOR

***1998: BoTT projects – rural water supply, Eastern Cape.**

Scoping Reports for 7 rural water supply projects, Eastern Cape.

***1998: Rural water supply at Amanyuswa, Vulamehlo, KZN.**

Scoping Report for rural water supply project at Amanyuswa, Vulamehlo, KZN South Coast.

****1999: Okulu Dam, KZN. Environmental Scoping.**

Scoping Study for the construction of a dam on the Okula River. Crystal Holdings, Tongaat, KZN.

***2000: Magaliesburg wastewater treatment works, Gauteng.** [Subconsultant to Mark Wood Environmental Consultants]

Environmental Impact Assessment of proposed wastewater treatment works, Magaliesburg, Gauteng.

****2000/2001: Inyoni and Ingweni Dams, KZN.**

Scoping Study for the construction of two farm dams on the Inyoni and Ingweni Rivers. Inyoni Farms. KZN.

****2000/2001: Establishment of a Catchment Management Agency (CMA) for the Thukela Water Management Area, KZN.** [Department of Water Affairs and Forestry]

Public Participation in development of a CMA Proposal.

*****2001: Rehabilitation of Pemba's water supply, northern Mozambique** [Mozambique Water Department]

Environmental input into the Engineering Feasibility Study for the upgrade and expansion of bulk water supply infrastructure and wellfield expansion. Compilation of Environmental Management Plan for the pre-construction and construction phase of this project.

***2005: Olifants River Water Resources Development Project.** [Department of Water Affairs and Forestry]

Compilation of Environmental Management Plan for the pre-construction and construction phase of the de Hoop Dam and related infrastructure.

MINING SECTOR

***2005: Olifants River Water Resources Development Project.** [Department of Water Affairs and Forestry]

Compilation of Environmental Management Plan for exploratory activities (drilling/ prospecting) related to the de Hoop Dam.

*****2007-2008: Borrow Pit 2, Quarry 2 and Quarry 3 (Sisonke District Municipality) for the upgrade of Sani Pass, P318** [KwaZulu-Natal Department of Transport]

Compilation of Environmental Scoping Reports, Environmental Impact Reports and Environmental Management Programme Reports and Applications to the Department of Minerals and Energy, for mining permits in terms of the Minerals and Petroleum Resources Development Act, 2002 (Act No 28 of 2002).

*****Aug 2008- March 2009: Review of environmental documentation produced for mining applications**

Peer reviewed a series of geohydrological specialist reports, Environmental Management Programme Reports (EMPRs) and Scoping reports for Ground Water Consulting Services Ltd.

AGRICULTURE/ AGRI-INDUSTRY

****2002: Proposed Umzimvubu Goat Processing and Production Facility in Mount Ayliff, Eastern Cape.** [Agricultural Research Council/ Alfred Nzo District Municipality]

Scoping Report for the development of a goat abattoir and small tannery plus other goat products production facility in a rural area of the Eastern Cape.

****2005/2006: Ntingwe Tea Outgrowers Programme** [Department of Agriculture]

Detailed Application for Authorization in terms of Section 22 of the Environment Conservation Act, Act No. 73 of 1989, in respect of an activity identified under Section 21 of the said Act.

*****2014: Feasibility Study for the proposed Petrusville Tannery, Renosterberg Local Municipality, Northern Cape** [MBB Consulting Engineers]

Investigation of the feasibility of establishing and operating a tannery in the Renosterberg Municipal Area of the Northern Cape from an environmental perspective including with respect to compliance with the environmental legislative framework.

*****2014: Feasibility Study for the proposed Malmesbury Dairy, Western Cape [MBB Consulting Engineers]**

Environmental feasibility investigation for the expansion of the Malmesbury Dairy and construction of a UHT Production Plant.

****2016: Review of EIA for proposed sugarcane development at the homestead section of IYSIS Ranch, Mhlume, Swaziland [Subconsultant to MBB Consulting Engineers – client:Tongaat Hullet]**

Review of the Environmental Impact Assessment Report for the proposed development. The focus of the review was risks to Tongaat-Hullett's Tambankulu Estate's agricultural operations, mainly in the form of risks to water quantity and quality in the Mbuluzi River.

OTHER

****1998: Extension to La Lucia Ridge Office Park, La Lucia.**

Scoping Report. Tongaat-Hullett Properties.

****1999: Richards Bay Strategic Environmental Assessment.**

Public Involvement Programme conducted for the Strategic Environmental Assessment of land designated for proposed industrial and urban development in Richards Bay. Municipality of Richards Bay.

****2000: Telkom undersea telecommunications cable and control station, Mtunzini, KZN. [Telkom]**

Scoping Report and EMP for laying of undersea telecommunications cable in Mlalazi Nature Reserve and construction of a control station in the town of Mtunzini.

****2011-2012: Environmental Constraints Frameworks (ECF) for Eskom's Field Services Areas viz Witbank, Pietermaritzburg and Groblersdal [Eskom]**

Conceptualisation and development of a strategic ECF, specific to Eskom's infrastructure development (in collaboration with S3 Technologies (GIS specialists). The ECF is a GIS based tool set up to generate three main outputs for any particular geographical area of operation.

- The "Environmental" map showing where the environment will be negatively affected by Eskom's infrastructure (Environmental Constraints).
- The "Technical" map showing where Eskom's infrastructure will be negatively affected by the environment (Technical Constraints).
- The "ECF" which is a composite map showing a combination of the above two constraints maps.

EMPLOYMENT RECORD

- 1999- Present:** **Environmental Assessment Practitioner**
Employed by ACER (Africa) Environmental Management Consultants
- 1998 - 1999** : **Environmental Assessment Practitioner**
Employed by GIBB Africa Consulting Engineers
- 1997 - 1998** : **Environmental Assessment Practitioner**
Freelance Environmental Consultant, subcontracting to Mark Wood Environmental Consultants, AfriDev Consultants in Environmental and Rural Development and GIBB Africa
- 1995 - 1997** : **Environmental Scientist (part time)**
Worked on a part time/ *ad hoc* basis while studying at the Department of Geographical and Environmental Sciences, University of Natal, Durban
- 1994 - 1995** : **Assistant Farm Manager**
Osgodsby Farm, Richmond, KwaZulu-Natal
- 1991- 1994** : **Molecular Biology Researcher**
Vegetable and Ornamental Research Institute, Agricultural Research Council and Department of Botany, University of Natal, Pietermaritzburg
- 1987 - 1988** : **Research Assistant (Soil Sciences)**
Department of Soil Science, University of Natal, Pietermaritzburg

EDUCATION

- 1995 - 1997** : University of Natal, Durban
MSc in Environmental Sciences
- 1988 - 1990** : University of Natal, Pietermaritzburg
MSc in Genetics (Plant Molecular Biology)
- 1987** : University of Natal, Pietermaritzburg
BSc (Honours) in Genetics and Biotechnology
- 1983 - 1985** : University of Natal, Pietermaritzburg
BSc majoring in Genetics and Biochemistry

COURSES UNDERTAKEN

- 2002:** Public Participation (Department of Agriculture and Environmental Affairs/ Manyaka Greyling Meiring)
- 2003:** Non-financial and Environmental Auditing- Methods and Techniques (Eagle Environmental)
- 2004:** Occupational Health and Safety Legal Compliance Seminar (Hank Jacobs, Safety Preparation Services)
- 2005:** Implementing Environmental Management Systems (ISO14001: 2004) (Centre for Environmental Management, Potchefstroom University)
- 2011:** Applying joint problem solving, as a process for consultation and delivery of services. (M.O.D Consulting, Kloof, KwaZulu-Natal)
- 2014:** Sharpening the tool: New techniques and methods in EIA (SE Solutions, 1 day course)
- 2015:** IAP2 – Public participation (IAIA/Golder Associates, 1 day course)

PUBLICATIONS

Diab, RD; Ellery, WN; Tooley, J; McKenzie, A and K Barnes. 1999. *The no development option versus the development option in an underdeveloped area*. Impact Assessment and Project Appraisal. Volume 17, number 3, pages 243-252.

Ellery, WN; Tooley, J; McKenzie, MA and C Bill. 1998. *Sustainable use of indigenous trees within and surrounding the Thukela Biosphere Reserve, KwaZulu-Natal*. Natal Town and Regional Planning Commission Report.

PRESENTATION PAPERS

Tooley, Janice, McKenzie, Ashleigh, Heinsohn, Dieter, van Schalkwyk, Len and Wahl, Beth. 2002. Integrating cultural heritage resource and environmental management.

Tooley, Janice, McKenzie, Ashleigh, Heinsohn, Dieter, Ballot, Steve and Barnard, Duard. 2004. Environmental Management in the Greater St Lucia Wetland Park: *On Shifting Sands*

Scherzer, PJ; Heinsohn, R-D; Tooley, J and McKenzie, A. 2005. Integration: are we doing all we can?

LANGUAGE SKILLS

Language	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Satisfactory	Adequate	Adequate