

CURRICULUM VITAE

SURNAME : ADAM (Weiermans)

FIRST NAMES : Jacolette

IDENTITY NUMBER : 7407190109082

PROFESSIONAL REGIS- Professional Natural Scientist (Pr.Sci.Nat., Reg number:

TRATION : 400088/02)
NATIONALITY : South African
CONTACT NUMBER : 082 852 6417

YEARS OF EXPERIENCE: 16

CAREER HISTORY:

Jacolette obtained a Master of Science in Zoology from the University of Pretoria in 2000. Her thesis, Roads as Ecological Edges for Rehabilitating Coastal Dune Assemblages in Northern KwaZulu-Natal, South Africa (published in Restoration Ecology Vol 11, Issue 1, p: 43-46) was based on field work conducted in the rehabilitating forests of Richards Bay Minerals, north of Richards Bay.

Since completion of her MSc, she has gained 16 years of professional experience in the environmental sector, and has been a certified Professional Natural Scientist since 2002. She is also a Fellow member of the Water Institute of South Africa (WISA). She has successfully conducted project management for numerous environmental assessments in terms of various legislated processes throughout South Africa for a wide range of clients, including the mining sector, the large-scale housing developments, private lodge developments, telecommunication industry, various engineering projects including pipelines, road construction, road upgrades. She has been responsible for various strategic projects such as Integrated Environmental Management Programmes for municipalities as well as Provincial State of the Environment Reporting. Due to her training as an ecologist/zoologist she provides the specialist skill of wetland and ecological assessments.

Jacolette has worked in all nine provinces of South Africa, as well as in Africa, Mozambique and DRC.

Jacolette has proven the capability to complete environmental assessments of challenging projects with various approvals required from different authorities, including Department of Environmental Affairs, Department of Agriculture, Forestry and Fisheries, Department of Water and Sanitation and Department of Mineral Resources. Her expertise is in managing these complex projects with the wide range of specialists, and identifying the key issues which needs to be mitigated. In line with the newer developments in the environmental field, she has obtained valuable experience in compiling biodiversity offset documents and negotiating these aspects with relevant government Departments and related authorities.

She has proven expertise in a broad range of environmental expertise which includes the following:

- Strategic Biodiversity Planning
- Biodiversity Offset Plans
- Environmental project management of large scale projects
- Environmental Impact Assessments
- Environmental Management Programmes and Plans
- State of Environment Reporting (SoER)
- Environmental license audits
- Public Private Partnerships (PPP)
- Geographic Information Systems (GIS) based analysis
- Applicability of Environmental Legislation
- Environmental Control officers during project implementation
- Specialist studies such as Wetland Assessments, Ecological Assessments, Water Quality Assessments, Wildlife Management Plans
- Management Plans such as Mine Rehabilitation Plans, Ecosystem rehabilitation plans
- Water Services Development Plans

- Environmental management legal and implementation course compilation and training
- Environmental feasibility studies

EMPLOYMENT HISTORY:

<u>Date</u>	<u>Employer</u>	Position
2002 - currently	Exigent	Managing member
2001 – 2002	Dynacon Technologies	Project Manager
2000 – 2001	VKE Engineers	Environmental Scientist
1999	University of Pretoria	Researcher

2002 – Currently Exigent

In 2002 Jacolette took the step to leave corporate service and became the Manager of the Environmental Business Unit. She is thus responsible for all project deliverables from within the Unit. Exigent grew from 2002 being only herself, to 16 staff members in 2008, of which 14 were professional scientists. Exigent provides the full spectrum of all environmental services from the two offices, located in Richards Bay and Pretoria. We have conducted projects throughout South Africa, and selected countries within Africa.

In December 2008, the Environmental Business Unit downscaled for a few years. It has since grown again into an entity of 6 environmental personnel. During the period of downscaling, Jacolette was responsible for was an assessment process as per NEMA, MPRDA and NWA requirements for a large international mining company in KZN. She has been involved in all phases of this project since 2003. The legislated environmental assessment process started in 2009 included 14 specialists with various expertise. This was a very sensitive and challenging project in terms of the surrounding ecosystems as well as local communities and job opportunities. All three required authorisations have since been obtained.

Since 2013, the projects of Exigent has grown again into a variety of projects for the Umhlathuze Municipality, RBM, RBIDZ, Gautrain Management Agency and private developers.

Applicable related experience

Since 2002, Exigent have provided specialist environmental expertise and project management to various mining houses. Exigent have completed numerous prospecting permit applications, EMPR applications for smaller quarries and larger mining projects, e.g. EXTRATA tailings dam (North West), Fairbreeze mining application (EMPR, IWULA and EIA) (Mtunzini, KZN). In 2005 Exigent was the environmental specialist on the project team for the decommissioning of a chrome mine in North West Province.

Two of the larger long term contracts included on-site project management of the environmental requirements for EXXARO (now TRONOX) heavy minerals mine in Empangeni (2003 – 2009) and the Sishen Iron Ore Mine in Northern Cape (2004 – 2007). The services to these two companies also included compilation of various documents, e.g. EMPR amendments, EMPR performance assessments, IWULAs, new application EMPRs, EIAs and day-to-day on-site management of environmental issues.

Jacolette has been responsible for conducting closure costing evaluations for the TRONOX mines (Hillendale, Fairbreeze, other mining right properties and Central Processing Complex) for a number of years, including the TRONOX Fairbreeze mine closure costings in 2012. She has also compiled a Closure costing for the Momar mine in Mozambique. This closure costing review included the concentrator, Mineral Separation Plant, mining areas, infrastructure, fuel storage, airstrip and power supply. Furthermore, she has conducted closure costing evaluations for the Kumba Iron Ore Mine in Sishen. She has just finalised the implementation of the new Regulations 1147 to a quarry site outside Empangeni. Furthermore, she is in the process of finalising the implementation of the new Regulations to the Richards Bay Minerals (RBM) sites, just north of Richards Bay.

Jacolette has been involved in the Zulti South project for RBM since January 2014. She is assisting with peer review of the ZS Mine permit applications and environmental authorizations in terms of the National Water Act, the National Environmental Management Act and the MPRDA. Jacolette has also

been involved in offset management processes for BHP Billiton and Vunene Mine.

Furthermore, as part of Jacolette's work experience was compiling the first draft of the Mining and Biodiversity Guidelines for the Chamber of Mines in 2008.

Other relevant experience

Jacolette has been involved in compilation of various strategic Environmental Management Documents, e.g. the Umhlathuze Integrated Environmental Management Plan, Environmental Aspects of the Mbonambi Nodal Framework Plans, Interim Report on Sustainable Development for the Department of Environmental Affairs in Northern Province as well as Strategic Business Plans for Johannesburg Water

In 2008 she compiled an environmental awareness training course for a large Consulting Engineers firm, and Exigent presented it to all their branches country-wide. Throughout the years, the value of an environmental feasibility study was proven to various clients. This involves an initial assessment of the site and its environmental legal and physical site constraints. Numerous of these studies were conducted to a range of clients, which assists in decision-making early in the project development phase.

Since 2002, she has been appointed as the environmental specialist on various Public Private Partnership projects, as regulated by the Public Finance Management Act. This included strategic environmental input to various phases of the project, and various levels of detail of contribution throughout the process.

The responsibility of Exigent to these projects included overall project management of the EIA team, thereby including all specialist studies, EIA application process, IWULA and EMPR, ecological and/or wetland specialist studies, other related permits e.g. heritage, protected tree species removal, ECO, where required. Furthermore, Exigent has completed various Environmental Control Officer positions during construction, as well as many ecological and wetland specialist studies. Some of the projects conducted in the recent years are listed below.

- Zulti South Mine (Richards Bay Minerals): Environmental specialist providing advise ito process, review of EAP submissions, consultation with Competent Authorities, compilation of TOPS permits, various legal submissions to Department of Water and Sanitation
- Gautrain Extension: Environmental Manager to the SMEC team
- Zulti North Water Use license Audit for Richards Bay Minerals
- Peatland assessment and GIS database for Mondi
- Maputaland wetland EIA screening for the CGS Seismic assessment
- Wetland delineation and functionality for Mpact, Felixton
- Zamokuhle Trust agricultural development, Mkuze
- Extension of the railway line for the Richards Bay Industrial Development Zone
- Township development for Ngwelezane Housing
- Environmental Control Officer: Medway Road, Umhlathuze for Richards Bay Industrial Development Zone, Summerset Ext 14 Housing Development, Midrand, Noordwyk Housing Development, Midrand, Waterline upgrades, Arboretum and Nseleni

<u>2001 – 2002 Dynacon Technologies (VKE Engineers merging company) – Environmental Project Manager</u>

After the merge of Dynacon Technologies with VKE Engineers, Jacolette was appointed as the Manager of the Environmental Impact Assessment section and had to manage all phases of the project process, client liaison, compiling proposals, financial management, specialist appointments and scope of works, compiling EIA reports, public meetings, public participation processes.

2000 – 2001 Environmental scientist – VKE Engineers

Jacolette joined the Environmental Department at the Johannesburg offices of VKE Engineers in 2000. We conducted various Environmental Impact Assessments and environmental management projects throughout South Africa. She was responsible for contacting specialists, client liaison and overall management of the projects as well as financial project flows and estimates. Specifically relat-

ed to the project duties - her duties included compilation of the environmental assessment reports, as well as conducting the public participation processes and facilitation of public meetings.

1999 Research position – University of Pretoria, Dr. Albert van Jaarsveld (for the Peregrine fund)

Jacolette conducted a GIS research project on the distribution of birds of prey in Madagascar for the Peregrine Fund. This project included making contact with various research organisations in South Africa as well as Madagascar in order to obtain data of the various birds included in the study. All available information contained in atlases and research papers were included in the dataset and distribution maps.

Her responsibilities included the final report including maps on the distribution status of endangered raptors of Madagascar, as well as an electronic GIS database.

QUALIFICATIONS OBTAINED AND COURSES ATTENDED:

Date	Institution	Qualification Obtained
2015	Terra Firma Academy	Carbon Footprint Analyst
2004	The Directorate of Professional Programmes of the Geological Society of South Africa	Groundwater in South Africa: Our most valuable future resource (Certificate Course)
2003	Working for wetlands	Wetland Rehabilitation Certificate Course
	Shangoni Management	Environmental Auditing Certificate Course-ISO 14001
	Rhodes University	Environmental and Resource Economics (Certificate Course)
2002	University of South Africa	Certificate course on Advanced Business Communication (1 year)
	DEA	Project Developer's Forum on Cleaner Development Mechanisms (CDM)
2001	Pretoria Technikon	Environmental management tools certificate course with the following subjects: Environmental Management and ISO 14000, Environmental Chemistry, Environmental Rehabilitation, Environmental Risk Assessment, Environmental Impact Assessment (1 year)
2001	AfriDev Consultants	SASS5 Biomonitoring Techniques Certificate
2000	VKE Engineers	Managing Projects in a Consulting Engineer's Practise Certificate
1999	University of Pretoria	GIS project Researcher - Madagascar raptors
2000	University of Pretoria	MSc Zoology (Restoration Ecology)
1996	University of Pretoria	BSc (Hons) (Zoology)
1995	University of Pretoria	BSc (Zoology)
1992	Verwoerdburg High School, Pretoria	Matriculation

SCIENTIFIC PUBLICATIONS AND CONFERENCES ATTENDED:

<u>Date</u>	Conference/publication
2012	Conservation Biology Oceania Conference, Charles Darwin University, Darwin, Australia
2000	Weiermans, J. & R. J. van Aarde. The effects of habitat edges in rehabilitating coastal dune communities in Richards Bay, KwaZulu – Natal, South Africa. <i>Restoration Ecology</i> Vol 11, Issue 1, p: 43-46.
2000	Weiermans, J. & R. J. van Aarde. The effects of habitat edges in rehabilitating coastal dune communities in Richards Bay, KwaZulu – natal, South Africa. Paper presented at the Wildlife Management Association of Southern Africa 2000 Symposium.
1997	Weiermans, J., A. van Jaarsveld & S. Chown. A multiple scale analysis of South African bird body – size distributions. Paper presented at the Zoological Society of Southern Africa 1997 conference.

MEMBERSHIP OF OTHER PROFESSIONAL BODIES OR RELEVANT ORGANISATIONS:

Jacolette is registered as a Professional Natural Scientist (Pr. Sci. Nat., Reg number: 400088/02) since 2002 and a Fellow member of the Water Institute of South Africa (WISA).

She is also a member of the Environmental Law Association of South Africa, the South African Institute of Ecologists & Environmental Scientists (SAIE&ES), and the South African Affiliate of the International Association for Impact Assessment (IAIA).