



## Evert Jacobs

### Senior Environmental Advisor

Evert is an Ecologist who has been involved in management of environmental development projects for the last 14 years. He has experience in very large infrastructure, mining and energy projects specifically in guiding development from concept phase through to execution and construction. His experience includes Permitting Strategies for small and Mega Projects in various countries, Environmental and Social Impact Assessments (ESIA), monitoring protocols for water quality and air quality, environmental management plans and construction management, environmental auditing, Geographical Information Systems (GIS), Water Use License Applications, Ecological Research and Ecological Processes which have been combined in his work related experience.

### Education & qualifications

**MSc, Ecological Research, University of Port Elizabeth (now Nelson Mandela Metropolitan University), Port Elizabeth, South Africa, 2009**

**Honours, Biology, University of Port Elizabeth, Port Elizabeth, South Africa, 2001**

**BSc, Biology, University of Port Elizabeth, Port Elizabeth, South Africa, 2000**

### Professional Affiliations

**South African Council for Natural Scientific Professions - Pr.Sci.Nat. - Professional Natural Scientist - Member**

### Experience

**14 years**

### Specialities/Areas of expertise

**Environmental project management, Environmental Impact Assessments, strategic environmental planning, environmental construction management and construction supervision**

## Relevant project experience

**Transnet Capital Projects, Ngqura Manganese Phase 1 Construction, Northern Cape, South Africa, Environmental Manager.** Evert was the Construction Environmental Manager on the project and managed the construction activities associated with the upgrading and refurbishment of the double rail line between Kimberley and De Aar. With support from environmental site officers and the construction management team, he was responsible for environmental compliance to the Transnet specifications and environmental authorisations and permits.

**Transnet Capital Projects, Ngqura Manganese, Ngqura, Port Elizabeth, South Africa, Environmental Project Manager.** Transnet Capital Projects appointed Hatch to conduct prefeasibility and feasibility studies for upgrading of their Manganese export corridor between Hotazel in the Northern Cape of South Africa to the Port of Ngqura situated in Port Elizabeth. The Hatch Environmental Services Group was appointed to conduct the environmental studies for this project to enable the permitting processes required for ESIA's for the rail corridor as well as port facilities. This role includes the management and coordination of several permitting processes for Environmental Authorisation, Water Use Licenses, Borrow pits and Atmospheric Emissions Licenses for a Greenfields port terminal and 800 km of rail.

**Transnet Capital Projects, Ore line Port Expansion: Phase 1B execution, Saldanha Bay, Western Cape, South Africa, Environmental Project Manager.** The Phase 1B execution included port expansion to increase the throughput capacity of iron ore from 38 Million tons per annum (MTPA) to 47 Mtpa through reclamation of marine areas and installation of an additional stacker/reclaimer, conveyor systems, and additional ship loader

and associated infrastructure. Evert's role was management of construction teams and contractors to comply with the relevant environmental authorisations and specifications. This included management of an Environmental Control Officer (external consultants) and a stakeholder monitoring process through an Environmental Monitoring Committee (EMC).

**Transnet Capital Projects, Ore line Port Expansion: Phase 1C Execution, Saldanha Bay, Western Cape, South Africa, Environmental Project Manager.** As part of the port expansion plans, a requirement for increasing the port throughput capacity to 60 Million tons per annum (MTPA) was identified. Engineering studies indicated that the port would be able to increase the throughput to 60 Mtpa utilising the existing infrastructure. Environmental requirements for this throughput increase included an amended air quality permit that was obtained through an environmental authorisation process. Evert's role during the project included drafting of environmental opinions and permitting strategies, managing of the environmental assessment practitioner according to the strategy in place, incorporating the air quality permit into the environmental authorisation process as well as construction management in terms of the environmental specifications in place.

**Transnet Capital Projects, Ore line Port Expansion: Phase 1B Dredging, Saldanha Bay, Western Cape, South Africa, Environmental Project Manager.** As part of the port expansion to reach 47 Mtpa, additional berth deepening was required to allow staggered ship loading of iron ore vessels. Evert's role was managing of the environmental assessment process to obtain authorisation, managing of the construction teams and dredging contractors to comply with the relevant standards and authorisations as well as managing of environmental consultants to monitor water quality parameters prior to and during dredging activities. This included drafting of environmental specifications, monitoring protocols and management plans and managing changes to project descriptions and ensuring permits were in place to allow for dredging activities to be completed successfully.

**Transnet Capital Projects, Ore line Port Expansion: Phase 1A Execution, Saldanha Bay, Western Cape, South Africa, Environmental Project Manager.** The project involved installation of dust mitigation systems and monitoring of dust fall and particulate matter in and around the Port of Saldanha. Evert's role was managing of the monitoring programmes and providing input into the dust mitigation procedures and systems to ensure compliance with standards and permitting requirements. Included in this role was a critical review of all monitoring reports and results.

**Transnet Capital Projects, Ore line Port Expansion: Reverse Osmosis Plant, Saldanha Bay, Western Cape, South Africa, Environmental Project Manager.** The environmental authorisation for the Phase 1B port expansion (at Saldanha Bay) to allow an iron ore throughput of 47 Million tons per annum (Mtpa) included a requirement to investigate effective dust suppression in the water scarce area. This led to a proposal to construct a Reverse Osmosis Desalination Plant to obtain water for use in the port. Evert's role included managing of the water use license application, managing of the appeal process following authorisation as well as managing of construction teams in terms of the environmental requirements. Evert also drafted the environmental specifications and monitoring protocols needed for establishing a baseline prior to the operational phase as well as managing of the environmental consultants for drafting the operational monitoring protocol based on the monitoring results. Evert's role further included liaising with stakeholders for scientific critique of water quality issues related to the RO Plant operations.

**Transnet Capital Projects, Ore line Port Expansion: Phase 2, Saldanha Bay, Western Cape, South Africa, Environmental Project Manager.** Managing of the Environmental Assessment for obtaining environmental authorisation for the project operational phase which included 23 specialist studies. This EIA was rated as one of the largest to be conducted in SA and would have increased the port throughput capacity to 93 Mtpa. Evert served as the project manager for related environmental requirements and was involved in environmental input into engineering designs.

**Transnet Capital Projects, 81 Mtpa Coal Line FEL 2 Study, Mpumalanga, Richardsbay, South Africa, Environmental Manager.** The Coal Line is a network of rail lines serving South Africa's coal industry both in terms of domestic coal supply as well as supply of coal for the export market. Evert's input into this feasibility study included a review of the project in terms of the Hatch PLP process including a review of the permitting requirements and a high level strategy during the feasibility study.

**Togo Rail, Republic of Togo, Togo Rail Transport Corridor, Lome, Togo, Environmental Project Manager.** This project involved scoping of the ESIA process and screening of a new Greenfields rail line connecting the northern border of Togo to the Port of Lome. Included in this project was an options analysis of the stockpile locations for iron ore export facilities. Hatch's role was to conduct an initial assessment using available land cover data to inform the route determination and scoping of the social impact based on the number dwellings that would require relocation.

**Tronox, Tronox Alto Parana, Parana, Paraguay, Environmental Manager.** The project environmental

scope included two work packages for the Key Elements Analysis that was initiated as a preparation project for pre-feasibility. Work Package 1 was a review of the in-country legislation as well as external country regulations for the establishment of a Greenfields mine, transport corridor through other countries as well as a port terminal located on the east coast of South America. Included in this work was a review of the environmental and social features of the project and the preparation for further investigations. Work Package 2 included a review of the restoration options and techniques to prepare for fields trials to determine the viability of restoration in the area which consists of high value agricultural land as well as rain forest. Evert coordinated and managed the environmental team as well as providing some specialist input into each work package.

**Xstrata, ASKAF Iron Ore Mine Expansion, Federik, Mauritania, Environmental Manager.** Evert's role in this project was to provide strategic input into the feasibility studies and to assess execution readiness for mine expansion for the client. Included in the project was several environmental challenges related to desalination of seawater and brine disposal.

**Grindrod, Matola Coal Terminal Expansion, Feasibility, Matola, Mozambique, Environmental Manager.** Grindrod appointed Hatch to investigate the feasibility of expanding their existing coal and magnetite facility in Maputo to increase coal throughput to 20 Mtpa. Evert's role on the project were supervision of the environmental monitoring studies associated with the feasibility studies as well as coordination and management of the environmental deliverables for the project with the assistance of an Environmental Manager.

**Grindrod, Matola Coal Terminal Expansion, Pre-feasibility, Matola, Maputo, Mozambique, Environmental Manager.** The Matola coal and magnetite terminal studies considered expansion of the facility to handle 20 Mtpa of product. Evert served as the project Environmental Manager responsible for compiling a permitting strategy and directing specialist investigations prior to the start of the environmental authorisation.

**Rio Tinto, TiO<sub>4</sub>, Inhambane, Mozambique, Environmental Manager.** Evert served as the project environmental manager for delivering the conceptual level studies for a greenfields pit to port mining development in Inhambane, Mozambique. The conceptual level studies included investigations into the various options for two mining licenses, two port locations as well as the connecting transportation corridors linking the mine sites to the port locations.

**Standard Bank, Lumwana Copper, Lumwana, Zambia, Environmental Advisor.** Evert assisted the project financiers in a due diligence of the mining operations of the Lumwana copper mine during the finance period. His role was to assess the environmental performance of the mine in terms of the approvals and licenses obtained as part of the environmental approvals process as well as against the finance agreement.







**Nelson Mandela  
Metropolitan  
University**

*This is to certify that, all the requirements having been met, the degree*

*Magister Scientiae*  
**(ZOOLOGY)**

*with all the associated rights and privileges, was conferred upon*

**Evert Philippus Jacobs**

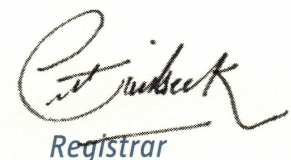
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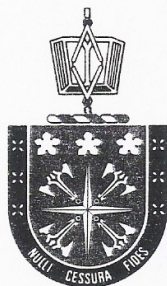
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**Vice-Chancellor**

  
**Registrar**



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Port Elizabeth



Universiteit  
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Port Elizabeth

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satisfied, the degree of

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voldoen is, die graad.

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(Zoology / Dierkunde)

has been conferred upon

toegeken is aan

**EVERT PHILIPPUS JACOBS**  
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Vice-Chancellor / Vise-Kanselier

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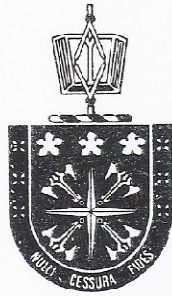
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ID 7803015073083

Port Elizabeth  
20 April 2002

University  
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Universiteit  
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Port Elizabeth

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## Baccalaureus Scientiae

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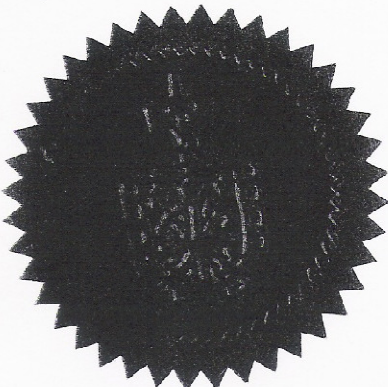
EVERT PHILIPPUS JACOBS

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Vice-Chancellor / Vise-Kanselier

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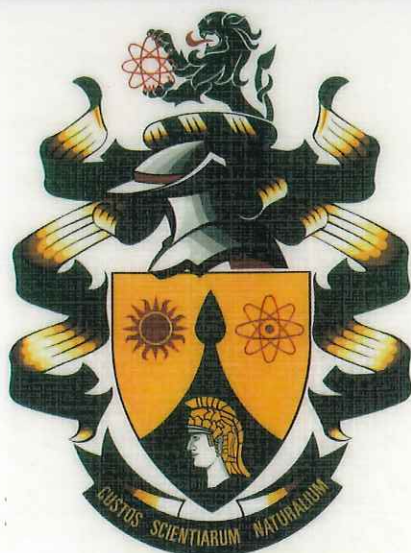
Registrar / Registrateur



Port Elizabeth

21 April 2001





THE SOUTH AFRICAN COUNCIL  
FOR  
NATURAL SCIENTIFIC PROFESSIONS

herewith certifies that

**Evert Philippus Jacobs**

Registration number: 400128/10

is registered as a

**Professional Natural Scientist**

in terms of section 20(3) of the Natural Scientific Professions Act, 2003

(Act 27 of 2003)

in the following field(s) of practice

(Schedule I of the Act)

**Environmental Science**

**04 August 2010**

4 August 2010

Pretoria

  
President

  
Chief Executive Officer