

Appendix B: Project Team CVs





Prashika started her career in the environmental field after spending 5 years' working for the Department of Agriculture: Genetic Resources Directorate. She joined Royal HaskoningDHV as a junior environmental consultant and has worked her way up to her present position as Principal Associate. In 2010, she obtained her professional registration as a Natural Scientist in the field of Environmental Science.

Prashika has built up an impressive résumé, having worked on diverse projects mainly in the petrochemical industry, as well as various large-scale power generation projects. She has established good working relationships with key clients and has undertaken several flagship projects on their behalf, such as Sasol and Eskom's Underground Coal Gasification project.

A hard-working and motivated individual, Prashika produces work of a high quality based on sound scientific thinking. She is valued by both clients and colleagues.

Curriculum Vitae Prashika Reddy

Environmental Scientist Transport and Planning

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Nationality South African

South African

Years of Experience 13 year(s)

Years with Royal HaskoningDHV 8 year(s)

Professional memberships

SA Council for Natural Scientific Professions, Professional Natural Scientist, 400133/10

Qualifications

- 2006 BSc (Hons) Geography (cum laude), University of Pretoria, South Africa
- 1999 BSc (Hons) Botany, University of KwaZulu-Natal, South Africa
- 1998 BSc Biological Science, University of KwaZulu-Natal, South Africa

Professional experience

Basic Assessment for the Sasol C3 Expansion Project, Sasol Industrial Complex, South Africa

- > Start Date: 2013
- > Client: Sasol Polymers
- > Project Value: R267,614.00

The C3 expansion project was initiated to address an estimated 105 ktpa (kilo tons per annum) additional propylene that will be available in 2014 as a result of various optimisation projects on the upstream Sasol Synfuel facilities. An opportunity was identified for the additional propylene to be utilised as feed for the polypropylene (PP) plants, namely PP1 and PP2. The C3 expansion project involves upgrading and implementing changes to the existing PP1 and PP2 process equipment to accommodate the increase in throughput.

Position: Project Principal

 Strategic project advice, quality review and approval of reports

Environmental Impact Assessment for the SCC Cold Side Capacity Enablement (MT-9) Project, South Africa

- > Start Date: 2013
- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R225,591.00

Environmental Scoping Study for the proposed SCC Cold Side Capacity Enablement project.

Position: Project Manager

Project management, review of environmental reports

PMU Support to Magalies Water, South Africa

- > Start Date: 2012
- > Client: Magalies Water
- > Project Value: R1,000,000,000.00

To provide programme and project management support to Magalies Water to enhance the implementation of Bulk Water supply capital projects.

Position: Environmentalist

 Environmental Support. Environmental management support to Magalies Water, Management of external EAPs.

BA for the proposed Sasol Iso -Octanol Long Term Project, Sasol Industrial Complex, South Africa > Start Date: 2012

- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R261,184.00

The Iso-octanol long-term phase 2 project involves a process whereby aldehydes are converted in the existing Iso-alcohol stream (in Octene Train III) by hydrogenation to its corresponding alcohols to achieve the desired product specification for the Iso-octanol product. A new reactor and a new distillation column with its associated equipment will be installed for this purpose. The expected Iso-octanol production will range between 7 and 9 kt / annum. In addition, a storage tank with a capacity of approximately 400 m3 and a loading pump will be installed to enable storage and loading of the final Iso-octanol product.

Position: Project Principal

 Strategic project advice, quality review and approval of reports

Centurion Metropolitan Core Master Plan, South Africa

- > Start Date: 2012
- > Client: City of Tshwane Metropolitan Municipality
- > Project Value: R4,300,000.00

The City of Tshwane requires a multi-disciplinary project team to assist the Client with the Preparation of a Master Plan of the Centurion Metropolitan Core Study Area. Position: Environmentalist

 Environmental Scientist. Environmental Screening Investigation.

Environmental Impact Assessment (EIA) and Waste Management Licence for the Matimba Ash Disposal Facility, South Africa

- > Start Date: 2012
- > Client: Eskom Holdings SOC Limited
- > Project Value: R3,430,630.00

Environmental Impact Assessment and waste management license for Matimba ash disposal facility. Position: Environmentalist



EIA Support and licensing application

Basic Assessment Process for the proposed upgrade of bridges 1 & 3 along the D622 in Bethal, Mpumalanga, South Africa

- > Start Date: 2012
- > Client: Bigen Africa
- > Project Value: R243,956.00

Basic Assessment Study for the proposed upgrade of bridges 1 & 3 along the D622 road in Bethal, Mpumalanga.

Position: Project Manager

Project Management and reviewer of reports.

Environmental Screening for the Commercial 125MW CSP, South Africa

- > Start Date: 2012
- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R185,000.00

Environmental Screening Investigation for the proposed 125 MW commercial concentrated Solar Power Plant located in Upington.

Position: Project Principal

Project Management, financial management, review of Environmental Scoping Report.

Cornubia Retail Park - EIA, South Africa

- > Start Date: 2012
- > Client: Tongaat Hulett Developments (Pty) Ltd
- > Project Value: R370,120.00

Undertaking the Environmental Impact Assessment (EIA), full Public Participation Process (PPP), attending client progress meetings and providing environmental input into the planning of the proposed Phase 2 Retail Development. Aim is obtaining environmental authorisation from KZN DAEA &RD.

Position: Environmentalist

Environmental Scientist. Strategic project advice, quality review and approval of reports.

EIA for a 50mwPhotovoltaic Plant, South Africa

> Start Date: 2011

> Client: Basekhu Capital

> Project Value: R991,632.00

EIA for the proposed 50 MW photovoltaic power plant in Mpumalanga

Position: Project Manager, Project Manager

Project management

Environmental Impact Assessment for the Sasol Secunda Growth programme 1B Proposed Retrofitting of Gas Turbines, South Africa

- > Start Date: 2011
- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R302,175.00

Environmental Impact Assessment for the Sasol Secunda Growth Programme 1B.

Position: Project Manager

Project Management and document control; regular liaison with the client; on-going review of progress of all aspects of the project; input into the Scoping and Environmental Impact Report (EIR), as well as the Environmental Management Plan (EMP), assistance with the Public Participation Process.

Environmental Impact Assessment - Sasol Debottlenecking, Sasol Industrial Complex, South Africa > Start Date: 2011

- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R289,000.00

Sasol Technology proposes to construct 2 storm water containment dams and 2 equalization ponds to provide surge for rain runoff; remove oil and suspended solids from the water; ensure that any water released to the river is quality controlled and to supply the water recovery plant with pre-treated water as processing for cooling water make-up.

Position: Project Principal

Project Management, Review and compilation of Basic Assessment Report and EMP

Basic Assessment - Mbumbu Tsakani Project, South Africa

- > Start Date: 2011
- > Client: Eskom Holdings SOC Limited



> Project Value: R314,087.00

A request received from Eskom to conduct a Basic Assessment for the proposed construction of a 132kV power line and substation for the Mbumbu-Tsakani project.

Position: Project Principal

Project Management, Review and compilation of Basic Assessment Report and EMP

Environmental and Social Impact Study (ESIA) for Envelor Lda in Mozambique, Mozambique

- > Start Date: 2011
- > Client: Envalor Lda
- > Project Value: R2,535,604.48

Appointed to obtain environmental authorisation to develop plantations, generate electricity and produce Ethanol from sugarcane and sweet sorghum, as well as the production of food crops.

Position: Project Manager, Project Manager

Project Management, Review and compilation of EPDA, ESIA and EMP

Mpumalanga: Technical Assistance DARDLA, South Africa

- > Start Date: 2011
- > Client: Mpumalanga Provincial Government
- > Project Value: R40,000,000.00

Appointment for professional engineers to assist the DARDLA, Mpumalanga Province in planning, designing, implementation, monitoring and evaluation of various infrastructure projects for a period of 36 months.

Position: Environmental Support

Environmental Screening Investigation

DoPW ECO Work in Pretoria, South Africa

- > Start Date: 2010
- > Client: Department of Public Works
- > Project Value: R1,800,000.00

Environmental Control Officer and Occupational Health and Safety for the refurbishment of the HG de Wit Building in Pretoria.

Position: Project Manager

 Project Management and Environmental Control Officer (ECP) work.

EIA for the Gas Plant Upgrade at the Coke battery within the ArcelorMittal PTA Works, South Africa

- > Start Date: 2010
- > Client: Arcelor Mittal (Pty) Ltd
- > Project Value: R308,857.00

ArcelorMittal South Africa (AMSA) proposes to undertake the necessary environmental studies to obtain environmental authorisation for the proposed Pretoria Gas Plant as the Coke Battery within the AMSA Pretoria Works Premises.

Position: Project Manager

Project Management, general project administration which include regular liaison with the Client and an ongoing review of progress of all project deliverables

Basic Assessment for the 132 kV line from Kabokweni to Hlau Hlau, South Africa

- > Start Date: 2010
- > Client: Eskom Holdings SOC Limited
- > Project Value: R263,058.00

Basic Assessment for the proposed 132kV Line form the Kabokweni Substation to the proposed Hlau Hlau substation.

Position: Project Manager

Project Management, client consultations review of public participation and Basic Assessment documentation.

Waste Management License for the BMW Waste Facility, South Africa

- > Start Date: 2010
- > Client: BMW SA (Pty) Ltd
- > Project Value: R168,797.00

The Waste License Application for the BMW facility.

Position: Project Manager

 Project management, client management, authority consultation, report compilations and internal review of work.



Doubling of rail line stations and level crossing elimination from Eerste Fabrieke to Greenview, South Africa

- > Start Date: 2010
- > Client: Passenger Rail Agency of South Africa

> Project Value: R460,000,000.00

The project involves the doubling of the rail line between Eerste Fabrieke and Greenview, provision of a new station at Greenview, upgrading of the stations at Mamelodi Gardens and Pienaarspoort and the elimination of a level crossing at Pienaarspoort, in Tshwane, Gauteng.

- Position: Environmentalist
- Environmental supervision.

Environmental Impact Assessment (EIA) for the SOLARFICA 75MW CSP, South Africa

- > Start Date: 2010
- > Client: Lereko Metier Capital Growth Fund Manager (Pty) Ltd
- > Project Value: R1,570,030.00

Environmental Impact Assessment (EIA) for the proposed solar power plant

Position: Environmentalist

 Compilation of Scoping Report, assistance with quality review of reports and amendment of Environmental Authorisations

Environmental Impact Assessment for the C3 Stabilisation Project situated on the Sasol Secunda Site, South Africa

- > Start Date: 2010
- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R447,172.00

Environmental Impact Assessment for the C3 Stabilisation Project situated on the Sasol Secunda Site

Position: Project Manager

 Project Management, review and compilation of EIA documentation, management of public process, liase with client and authorities

Environmental Support for the Department of Water and Environmental Affairs Reviews, South Africa > Start Date: 2009

> Client:

> Project Value: R158,400.00

Review Environmental Impact Assessments related to strategically important developments (SIDS) and the Energy Response Plan (ERP)

Position: Environmental Support

Review of EIAs for State-owned entities as well as renewable energy projects

Environmental Impact Assessment for the proposed Biogas to Power Plant Project at Sasol Synfuels, South Africa

- > Start Date: 2009
- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R167,865.00

Basic assessment study for the Biogas to power plant project

Position: Project Manager

 Project management, compilation of environmental reports

Rustenburg Integrated Rapid Public Transport Network (IRPTN), South Africa

- > Start Date: 2009
- > Client: Rustenburg Local Municipality
- > Project Value: R3,000,000,000.00

Planning and implementation of the Rustenburg Integrated Public Transport Network (IRPTN).

Position: Environmentalist

Environmental Assessment

Environmental Impact Assessment and Environmental Management Plan for the proposed township development in Glen Erasmia Ext in the Ekurhuleni Metropolitan Municipality, South Africa

- > Start Date: 2009
- > Client: Witfontein Ext. 28 (Pty) Ltd
- > Project Value: R485,434.97

Environmental Impact Assessment and Environmental Management Plan for the proposed township development in Glen Erasmia Ext in the Ekurhuleni Metropolitan Municipality

Position: Project Manager



Project management

Environmental Impact Assessment for the underground coal gasification in Amersfoort Area, South Africa

- > Start Date: 2008
- > Client: Eskom Holdings SOC Limited
- > Project Value: R3,700,909.01

Undertaking the Environmental Impact Assessment process for (EIA, Waste Management License, Water Use License), for the Underground Coal Gasification (UCG) project for Eskom Holdings

Position: Project Manager

Project Management and quality controlling

Environmental Impact Assessment for the proposed Sasol Bioworks upgrade, South Africa

- > Start Date: 2008
- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R306,101.25

Sasol One Bioworks Expansion

- Position: Project Manager
- Overall Project Management and quality control

EIA or the Amendment of Mining Right for the UCG Pilot Plant, South Africa

- > Start Date: 2008
- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R404,000.00

Environmental Impact Assessment and Mining Authorisation for the Underground Coal Gasification Pilot Project, located in Secunda Mpumalanga Province.

Position: Project Manager

Overall Project Management and quality control

Basic Assessment for the proposed Tar Value Chain Abatement Project, South Africa

- > Start Date: 2008
- > Client: Sasol Technology (Pty) Ltd

> Project Value: R107,255.50

Basic assessment for the proposed Tar Value Chain VOC Abatement Project

Position: Project ManagerOverall Project Management and quality control

Environmental impact Assessment for the proposed installation of second filter, precoal tank and pit at the Sulphur Granulation Plant, South Africa

- > Start Date: 2008
- > Client: Sasol Technology (Pty) Ltd
- > Project Value: R300,000.00

Installation of a Second Filter, Pre-coal Tank and Pit as the Sulphur Granulation Plant.

Position: Project Manager

 Project management of the project, compilation of the scoping and final reports. Attending site meetings and inspections

Environmental Management Framework (EMF) for Dinokeng Project Area, South Africa

- > Start Date: 2008
- > Client: Gauteng Department of Conservation
- > Project Value: R887,625.00

Prepare an EMF and SEMP to ensure that development does not compromise the environmental features and resources of the area, and to satisfy the need for strategic spatial management guidance.

Position: Project Manager

Overall Project Management and quality control

Independent Environmental Control Person for Gautrain, South Africa

- > Start Date: 2008
- > Client: Gauteng Department of Roads and Transport
- > Project Value: R2,973,960.50

Environmental Management Plan (EMP) monitoring and compliance

Position: Environmental Control Officer

Environmental Control Officer

Environmental Impact Assessment - Water Recovery Project, South Africa

- > Start Date: 2008
- > Client: Sasol Technology (Pty) Ltd



Project Value: R175,525.00
 EIA for the Water Recovery Growth Project
 Position: Project Manager

Project management, compilation of the scoping and final reports and EMP

Majuba Combined Cycle Gas Turbine (CCGT) Power Plant, South Africa

- > Start Date: 2008
- > Client: Eskom Holdings SOC Limited
- > Project Value: R1,207,196.00

Environmental Impact Assessment for the proposed Combined Cycle Gas Turbine (CCGT) power plant in the Amersfoort Area, Mpumalanga

Position: Project Manager

 Project management, screening assessment, compilation of scoping and EIA reports and EMP

Steelpoort Borrow Pits, South Africa

- > Start Date: 2007
- > Client: Eskom Holdings SOC Limited

> Project Value: R247,904.34

Mining Right for the borrow pit associated with the construction of the Steelpoort Pump Storage Scheme Position: Project Manager

Project management

Pomfret Military Base: Rehab of Asbestos Fibre Polluted Areas, South Africa

- > Start Date: 2006
- > Client: Department of Public Works
- > Project Value: R2,122,870.00

Assessment of all water related engineering infrastructure.

- Position: Environmental Support
- Ad hoc environmental support to PCM team







Nicole is an Environmental Consultant with seven years experience in the power and mining sectors, having undertaken work in Africa, Europe, Middle East, USA and Fiji.

She has focussed on management plan preparation, mine decommissioning (closure) and audits of power and mine investments. Areas of expertise include: Scoping Reports, Environmental Impact Assessment (EIA), Environmental Management Programmes, Environmental Audits, and Mining Right Applications. Key project experience includes: Trekkopje Mine, Tshipi è ntle Mine, Bon Accord Mine, Wonderfontein Mine, Vatukoula Gold Mine, Northland Mine, a Biofuels project in Mozambique, various Eskom power lines, and Sasol waste management licenses.

Curriculum Vitae Nicole Botham

Environmental Consultant Transport and Planning

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Nationality South African & British

Years of Experience 7 year(s)

Years with Royal HaskoningDHV 7 year(s)

Qualifications

- 2011 University of Johannesburg, MA Environmental Management
- 2009 University of Johannesburg, BA (Hons) Geography
- 2008 University of Johannesburg, BA Geography

Professional experience

EIA and WML for Full Scale Composting of Sludge Waste Streams, South Africa

- > Start Date: 2014
- > Client: Sasol Chemical Industries (Pty) Ltd
- > Project Value: R850,000.00

The proposed project involves constructing a full scale compositing site that will be able to handle approximately 200 000 - 300 000 t/a of sludge. The RHDHV environmental team have been appointed to conduct an EIA in support of the Environmental Authorisation and Waste Management Licensing processes.

- Position: Environmental Consultant
- Assigned Tasks: Compilation of environmental reports, management of specialists; public participation

Basic Assessment for the Eskom 132kV Power Line from Mbumbu Substation to the Proposed Tsakani Substation, South Africa

- > Start Date: 2014
- > Client: Eskom Holdings SOC Ltd
- > Project Value: R521,270.00

Basic Asssessment for the proposed 132kV Power Line from Mbumbu to Tsakani Substation

- Position: Environmental Consultant
- Assigned Tasks: Compilation of Basic Assessment Report, management of specialists, and public participation

Environmental Impact Assessment (EIA) and Waste Management Licence for the Matimba Power Station Ash Disposal Facility, South Africa

- > Start Date: 2012
- > Client: Eskom Holdings SOC Ltd
- > Project Value: R3,430,630.00

Environmental Impact Assessment and waste management license for Matimba ash disposal facility.

- Position: Environmental Consultant
- Assigned Tasks: Compilation of environmental reports and public participation

Rendering of Various Environmental and Mine Health and Safety services on various quarries and borrow pits for the Roads and Stormwater Division, South Africa

- > Start Date: 2012
- > Client: City of Tshwane Metropolitan Municipality
- > Project Value: R19,215.00

Rendering environmental/mine health/safety services: various quarries/borrow pits,

- Position: Project Manager
- Assigned Tasks: Mining Right Applications, management of specialists and sub-contractors, management of budget, reviewing environmental reports

EIA and WML for the Underground Coal Gasification Project and associated infrastructure in support of cofiring of gas at the Majuba Power Station, Mpumalanga, South Africa, South Africa

- > Start Date: 2008
- > Client: Eskom Holdings SOC Ltd
- > Project Value: R3,700,909.01

Undertaking the Environmental Impact Assessment process for (EIA, Waste Management License, Water Use License), for the Underground Coal Gasification (UCG) project for Eskom Holdings

- Position: Environmental Consultant
- Assigned Tasks: Public Participation

Social Impact Assessment for Bio-fuels Project

- > 2013 On-going
- > Mozambique
- Lead Author of a Social Impact Assessment for a biofuels project in Mozambique

EIA for an Antimony Process Plant

> 2013 - 2014

> Oman

Environmental Consultant for the Environmental and Social Impact Assessment (ESIA) of an Antimony Process Plant in Oman. Provision of water and social baseline information and identification of project associated impacts and mitigation measures.



Environmental Monitoring and Review for the Northlands Project

> 2012 - 2013

- >Sweden
- Environmental Consultant for the on-going monitoring and completion test of Northland in Sweden. Reviewed environmental and social compliance. Monitored project associated impacts and mitigation measures from construction to operational phase.

Review and Assessment for the Mpokoto Gold Mine

- >2012
- > Democratic Republic of Congo
- Environmental Consultant for the initial review, assessment and PFS gap analysis of Mpokoto Gold Mine. Provided a detailed assessment of the Environmental Legislative process required. Developed a schedule and programme for a potential EIA.

Review and Gap Analysis for the Vatukoula Gold Mine

- > 2012
- > Fiji
- Environmental Consultant for the Environmental and Social Gap Analysis of Vatukoula Gold Mine against IFC Performance Standards and Equator Principles.

Review and Gap Analysis for the Coal Mine in the USA > 2012

- > United States of America
- Environmental Consultant for the Environmental and Social Gap Analysis of the White Oaks Project in Illinois against IFC Performance Standards and Equator Principles.

Scoping Study for a mine in Burkina Faso

- > 2012
- > Burkina Faso
- Environmental Consultant for the scoping study of a prospect manganese resource in Burkina Faso.
 Provided Environmental and Social Impacts and

mitigations for the proposed mine. Set out Legislative requirements need for applications and permits.

ESIA for Wonderfontein Coal Mine

> 2011

> South Africa

Environmental Consultant for the Wonderfontein Mine Conversion of the EIA to comply with IFC Performance Standards and Equator Principles. Converted environmental baseline, impacts and mitigation measures to comply with international best practice standards.

Scoping Study for Bon Accord Mine

- > 2010 2011
- > South Africa
- Environmental Consultant for the Scoping Study of the proposed Nickel mine in South Africa. Determined the Environmental and Social implications of the proposed develop and assisted with stakeholder consultation.



Integrated Water Use Licence Application for Tshipi è ntle Mine

- > 2009 2010
- > South Africa
- Environmental Consultant for the development of a Water Use License Application for the Tshipi è ntle Mine to ensure that water would be available for the initiation of the mine. Provided liaison with government officials and established all necessary application documentations.

EIA for a Mine Access Route in Namibia

- > 2009 2011
- > Namibia
- Environmental Consultant for the Environmental and Social Impact Assessment of the new access route from Trekkopje Mine to Arandis. Developed community stakeholder consultation process. Responsible for delivering the Environmental and Social Impact Assessment.

Publications

- Botham, N.D., Kelso, C.J. and Annegarn, H.J. (2011). Best practice to acquire a mine closure certificate: a critical analysis of the De Beers Oaks Diamond Mine, Limpopo Province, South Africa, 6th International Conference on Mine Closure, Canada, 18-21 September 2011.
- Botham, N.D., Bower, G., Vercoe, J. and Lerotholi, N. (2013): Mine closure liabilities and risk management – minimizing the pitfalls in decommissioning policy, *The Southern African Institute of Mining and Metallurgy: Mining, Environment and Society Conference*, 27-28 November 2013.

