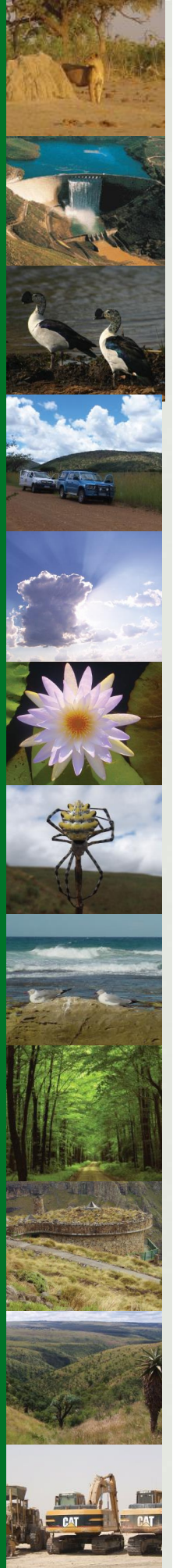


# **APPENDIX A**

EAP Qualifications and experience



**ENVIRONMENTAL IMPACT MANAGEMENT SERVICES**



*Leaders in Environmental Management*

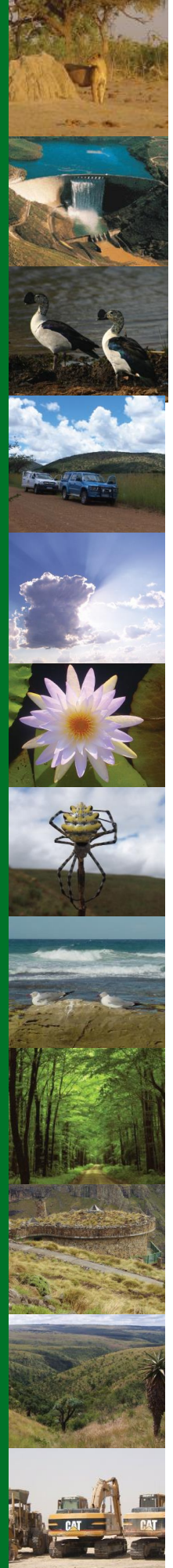
## COMPANY OVERVIEW

Environmental Impact Management Services (Pty) Ltd (EIMS) was founded in 1993 and has steadily grown to be a significant player in the environmental management consulting industry in South Africa and the rest of Africa.

Environmental management and sustainable development have become business imperatives in the 21st century. Identifying, understanding and complying with environmental legislation presents the greatest challenges facing South African industries and developers today. SA Law has both public law provisions and private law remedies for environmental transgressions. There is also provision for application of African Customary Law and common law where legislation is lacking.

EIMS is made up of specialist consultants from a diversity of environmental fields and in conjunction with our range of local and international network partners we provide EIMS clients with access to an unprecedented body of knowledge and expertise in environmental risk management.

Our company is guided by our codes of ethics, professional practice and philosophies leading us towards attaining our stated vision and mission for EIMS.



## OUR VISION

By providing the highest quality of service to our clients and maintaining high levels of professional ethics and admirable core values, our vision is to be top of the list of preferred strategic partners in the field of environment and sustainability consulting.

## OUR MISSION

We are determined to be the benchmark of quality within our industry by being the most innovative, diversified environmental consulting firm in Africa.

To achieve this position we have become a customer-orientated enterprise, committed to technical excellence with significant resources devoted to building an array of new products and services.

All our consultants share and uphold a common set of admirable codes of professional conduct and codes of ethics. We operate in selected market segments focussing on energy, manufacturing and mining industries. Geographically we cover the whole of Africa and our areas of speciality range from Environmental Impact Assessments to integrated sustainability reporting.

We are committed to embracing modern technology and providing our clients with state of the art environmental information systems and solutions. We will provide inspirational leadership in environmental strategy formulation and stakeholder partnerships in solving environmental problems. We shall apply environmental laws with integrity and fairness in the process of conducting enviro-legal and due diligence audits and identifying environmental risks and formulating mitigation measures.

EIMS takes its role of environmental advisor extremely seriously and where possible focuses our attention on capacity building initiatives and philanthropic actions.

During 2003, the group sponsored the production of educational material for the Endangered Wildlife Trust's Eco-warrior programme, which conducts environmental education programmes in primary schools in previously disadvantaged areas.

EIMS is an annual corporate sponsor of the Bulungula Incubator NGO in the Xhosa Mouth Administrative Area in The Eastern Cape.



*Leaders in Environmental Management*

## EIMS'S PHILOSOPHY AND COMMITMENT

EIMS's business philosophy is guided and underpinned by the concept of Sustainability, encompassing environmental, social and economic sustainability. Sustainability is a strategy for achieving economic and social development for all, while protecting the natural environment on which all life depends. Sustainability and sustainable development are therefore understood in the context of the integration of economic development, improvement of social structures and more efficient use of ecological resources in order to maintain the integrity of our socio-economic and ecological systems. Responsible care is used as a guiding principle and this can be effected through promoting equitable and fair sharing of resources and caring for these resources more wisely.

The approach proposed is to identify existing and future environmental problems, analyse the underlying causes, and determine possible solutions using environmental pragmatism. Understanding both the pressure and enabling factors which act as underlying causes of environmental problems, is critical to designing appropriate solutions.

Our consulting, advisory and training services are aimed at empowering our clients' manpower complement to develop the professional capacity to prevent and minimise their organizations' environmental risks and liabilities, resulting out of potential legal non-compliance or undue physical harm to the environment or social well-being of communities.

In guiding EIMS to attain its stated vision and mission the following commitments are made to our clients:

- EIMS will ensure quality of deliverables and will strive for continual improvement;
- EIMS staff are required to commit to our code of professional conduct (based on the South African Council for Natural Scientific Professions code of ethics); and
- Staff members are registered professional scientists and acquire the necessary certifications.
- All EIMS network partners and sub-consultants are selected on the basis of their expertise, experience, track record and adherence to relevant professional codes of ethics and conduct.



## SHAREHOLDING AND OWNERSHIP

EIMS is 60% owned by Teboho Nkhahle a black previously disadvantaged individual, rendering the firm fully empowered in terms of the Black Economic Empowerment (BEE) legislation. Teboho currently also serves as a Non-executive Director for Umgeni Water, and has recently been appointed into the

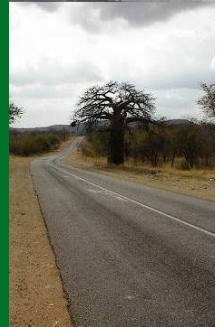
prestigious role of Chief Director: Environmental Policy Alignment at the Department of Public Enterprises.

## EMPLOYMENT EQUITY

The firm practices active affirmative action in its staffing policies and is proactively aimed at redressing the imbalances of the past. The current levels of black staffing at different tiers of the company structure are indicated below.

EIMS Staff Composition					
	Directors	Senior Professional	Junior Professional	Support Staff	Total
Black Male		1	5		6
Black Female		1	2	2	5
Indian Male		1			1
Indian Female					0
White Male	2	5	2		9
White Female			2		2
Totals	2	8	11	2	23
% Black Total	0%	38%	63%	100%	52%

EIMS is a level 2 BBBEE verified company.



# EIMS SERVICES AND EXPERIENCE:

## ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT PLANS

Since 1996, environmental authorisations have been a mandatory requirement for a wide variety of development activities, in South Africa and increasingly in the rest of the African continent. EIMS has completed several hundred Environmental Impact Assessment (EIA) studies in several African Countries.

EIMS has the expertise and experience available to undertake the full spectrum of studies required for EIA's, in accordance with the Equator Principles, and the national requirements of any African Country or alternatively those of the World Bank, International Finance Corporation, African Development Bank and all other funding agencies. This includes the statutory public participation and consultation process, specialist studies (through our extensive network of industry leading, pre-approved specialist sub-consultants) and all the required interactions with the regulating authorities.

EIMS prides itself in being able to provide a tailor made and practical approach to EMPs. We pride ourselves in that we follow the No Net Loss Approach, where possible, to our EIA's.

EIMS has a specific core focus, and experience, in conducting EIA's and EMPs for large infrastructure projects, linear developments and components of the power and energy industries. The following list provides a brief glimpse at EIMS's extensive experience in conducting high profile, complex and sensitive EIA's and EMPs:

- EIA and EMP for 2 OCGT peaking power plants (980MW and 500MW respectively) in KwaZulu Natal and Eastern Cape, RSA;
- EIA for a nuclear waste (ferrous and non-ferrous) smelter at Pelindaba, North West, RSA;
- EIA for spent nuclear fuel storage facility at Pelindaba, North West, RSA;
- EIA for biodiesel facility in Bougouni Province, Mali;
- EIA for a 250km long high voltage electrical transmission line between Mchuchuma and Mufindi, Southern Tanzania;
- EIA's and EMPs for the Gauteng Freeway Improvement Project, Gauteng Province RSA;
- EIA's and EMPs for numerous High Voltage Transmission Lines for Eskom, RSA; and
- EIA and EMPR for the first ever On-shore Natural Gas Production Right, Virginia, RSA.



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# EIMS SERVICES AND EXPERIENCE:

## ENVIRONMENTAL MANAGEMENT SYSTEMS

EIMS is one of the foremost consultancies in Africa with respect to tailored design and implementation of ISO 14001 compliant, strategically appropriate environmental management systems (EMS). Ever since the ISO 14001 International Standard was first published in 1996, the firm has actively participated in the development of the standards, and has consequently become well known for high quality ISO 14001 EMS development services in a wide variety of industries, including: Chemical manufacturing; Major civil engineering contracting; Telecommunications; The armaments industry; Precious metals refinery; Automotive component manufacture; Power sector; and Waste management. EIMS has also has experience in developing integrated management systems, including integrating the ISO 14001 EMS with Health and Safety Systems, and ISO 9001 Quality Management Systems.

The firm's approach to system design and implementation is based on a solid foundation of conventional business management theory and expertise, blended with pure environmental management. The result is a system that is specifically designed to optimise synergies with other management systems already in place in the client's organisation, and that fully supports the client's strategic and management objectives. A strong project management approach is followed to ensure that the system is implemented to specification, on time and within budget.

The firm's staff have provided external auditor and other ISO 14001 related services to several accredited certification service providers. Relevant members of the firm are certified ISO 14001 auditors, and are participating in the South African component of TC 207, the working group of the ISO that is responsible for the ISO 14000 suite of standards. Selected ISO 14001 EMS design and implementation experience is listed below:

- ✎ EMS for the construction of the Lesotho Highlands Water Project (Phase 2B);
- ✎ EMS for the Bakwena Platinum Highway, North West, RSA;
- ✎ EMS for Matimba Power Station, Limpopo, RSA;
- ✎ EMS for the Coega IDZ, Eastern Cape, RSA;
- ✎ EMS Development and implementation for Primary Energy Division of Eskom; and
- ✎ Paperless EMS for Vodacom Group, RSA.





# EIMS SERVICES AND EXPERIENCE:

## CORPORATE AND STRATEGIC ENVIRONMENTAL SERVICES

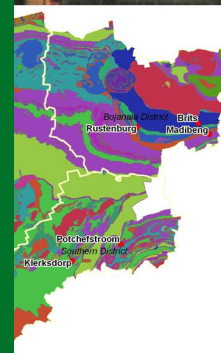
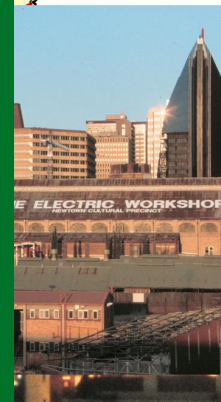
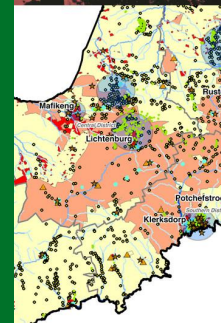
EIMS has, over the past few years played an increasing role in development of corporate strategic environmental services in South Africa. Initiatives like the King II Report on Corporate Governance highlight the need for companies to address environmental issues, beyond mere legal compliance, for ethical, commercial and risk management reasons. Director liability has strongly influenced perceptions in boards of directors. For many companies, their environmental profile is now a matter of strategic concern.

The concept of "multiple bottom line" sustainability, where an organisation is expected to be sustainable economically, socially and environmentally, is now generally accepted in responsible society. The rise of sustainability indexes on the world's stock exchanges also presents opportunities for companies that adopt responsible environmental profiles. In some countries, legislation has been passed to limit investment in companies that cannot demonstrate adequate environmental responsibility. In South Africa sustainability reporting is now a reality too, for both commercial and legal reasons.

EIMS is able to provide a wide range of corporate and strategic environmental services including:

- Strategic evaluation of environmental drivers and develop key environmental performance areas to measure sustainability performance;
- Environmental performance and sustainability reporting;
- Drafting of Environmental Management Co-operation Agreements;
- Risk Assessment and management services and environmental performance and/or compliance monitoring services to funding institutions and insurers;
- Strategic environmental assessments;
- External verification of annual reports; and
- Legal compliance auditing.

EIMS has also provided services to the regulators in South Africa and Lesotho, for the development of legislation on environmental impact assessment and nature conservation.



# EIMS SERVICES AND EXPERIENCE

## BASELINE MONITORING AND MANAGEMENT SERVICES

EIMS offers expert baseline assessments and monitoring of water quality (abiotic and biotic factors), aquatic health, and vegetation.

EIMS has a team of scientists who are leading the field locally and internationally in their field of expertise and applying their expertise to ensure a sustainable approach to management of the environment. EIMS offers the following services in baseline monitoring and management:

- Baseline vegetation assessments including vegetation mapping;
- Alien and invasive weed eradication programmes;
- Ecological restoration and rehabilitation plans;
- Riparian habitat assessments;
- Aquatic invertebrate assessments (according to the South African Scoring System-SASS);
- Identification and assessment of freshwater diatoms and other algae;
- Assessment of aquatic health using diatom community composition;
- Bio-assessment using a suite of Biomarker Assays including: EROD, CEA, CAT, GSH, MDA, Protein carbonyls, and Metallothione (MT).
- Identification and assessment of harmful algal blooms (HAB);
- Monitoring of physical and chemical parameters in the water environment;
- Integrated aquatic health assessments;
- Water Use licencing applications.

EIMS has a broad experience of water monitoring and management including, but not limited to:

- Long term water quality monitoring (chemical) and interpretation for the regional waste disposal facility in East London, Eastern Cape, RSA;
- Water quality assessments of the Wemmer Pan area as a component of the Strategic Environmental Assessment, Gauteng, RSA;
- Vegetation mapping and assessment for the proposed Lisbon Estate Golf Estate, Limpopo, RSA;
- Algal assessments for the Department for Water Affairs and Forestry's National Algal database;
- Algal assessment as an indicator of wetland water quality for the Zonkázizwe Development, Gauteng, RSA.



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# EIMS SERVICES AND EXPERIENCE

## WASTE MANAGEMENT CONSULTING SERVICES

EIMS is well placed to assist companies, local authorities and others in the development of appropriate, legally compliant waste management strategies. The proliferation of environmental legislation in South Africa over the past decade has left many companies exposed in this regard, and EIMS brings a considerable level of expertise to bear, to address client needs. Some of the specific services that the firm can provide to a high level of competence are as follows:

- ✎ Drafting of Integrated Waste Management Plans;
- ✎ Waste Assessments and compliance auditing;
- ✎ Assessment of disposal and treatment technology alternatives;
- ✎ EIA's for landfills and other waste disposal facilities, including incinerators;
- ✎ EIA's for waste transport;
- ✎ Duty of Care assessments;
- ✎ Waste minimisation and recycling opportunities;
- ✎ Energy from waste projects;
- ✎ Waste management training;
- ✎ Permitting and licensing;
- ✎ Skills development and competency evaluation;
- ✎ Environmental monitoring programmes; and
- ✎ Health and safety strategies.

Through EIMS's risk based approach, the firm ensures that the solutions provided to the client are cost effective, practical, appropriate and compliant with the specific regulator requirements.

A few examples of past experience in waste management consulting services conducted are listed below:

- ✎ Ambient environmental monitoring and compliance auditing for the excavation and transfer of 6,4 million cubic meters of solid waste for the New Doha International Airport, Qatar;
- ✎ Environmental Impact Assessment for a General Waste disposal facility located in Wemmer Pan, Johannesburg, RSA;
- ✎ Conducting of training services for the Gauteng Health Department Health Care Risk Waste Management (HCRWM) training programme, RSA
- ✎ Water quality monitoring for the East London Regional Waste Disposal Site, Eastern Cape, RSA.



# EIMS SERVICES AND EXPERIENCE

## ENVIRONMENTAL CONTROL OFFICERS / COMPLIANCE MONITORING

A key aspect of environmental management, often enshrined in the governing legislation, is the need to ensure adequate and effective enforcement of the environmental management remedies available. More and more emphasis is being placed on the duty of care for the environment. This pressure is applied through command and control and to a lesser extent self regulatory mechanisms.

EIMS offers a unique, integrated approach to assist clients in monitoring and recording environmental compliance aspects of their activities. EIMS has a team of qualified and experienced environmental practitioners whose main aim is to guide and advise clients to ensure responsible care of the environment and to reduce our clients potential environmental liabilities. EIMS offers the following environmental compliance monitoring services (amongst others) to the construction, government, mines, and any other industry who may have a direct or indirect influence of their receiving environment:

- Full time or Part time environmental control officers (ECO)/ environmental officers;
- Environmental monitoring services (water/air/ soil monitoring);
- Reinstatement and rehabilitation programmes; and
- Environmental awareness training.

EIMS has developed a documented, systematic, statistical based compliance monitoring approach. This ensures accurate and representative reporting to both clients and the regulating authorities and their associated enforcement agencies. Our compliance monitoring experience include:

- Team of full time independent ECOs for the Transnet Multi Products Pipeline between Gauteng and KwaZulu natal; RSA.
- Full time ECOs for Eskom's Duvha to Leseding 400kV Transmission line, Limpopo, RSA.
- Independent auditor for Eskom Medupi Power Station, Limpopo, RSA.
- Independent ECO for SANRAL Gauteng Freeway Improvement Project, RSA.



# EIMS SERVICES AND EXPERIENCE

## MINERAL TENURE

Mining and natural resource extraction and utilisation has for decades provided the backbone to the South African economy. As natural resources are depleted and the demand for these resources increases, the need for feasible reserves is rapidly expanding. South Africa and indeed the remainder of the African continent proved one of the few options available for the prospecting for and supply of, valuable natural resources. The correct and sustainable utilisation of these natural resources is receiving greater attention and the legislation protecting the environment is becoming increasingly onerous. The environmental legislation in South Africa specifically requires that a mining right or mining permit is obtained prior to commencement with mining activities.

EIMS has significant experience in carrying out the required processes in order to prepare and submit applications for mining rights, production rights, exploration rights, prospecting rights and mining permits. This includes all the necessary baseline investigations, feasibility assessments, public participation processes, impact assessments, and related permits and authorisations.

The firms experience in the mining industry includes:

- ✎ Compilation of the EIA and EMPR for the first ever On-shore Natural Gas Production Right Application for Molopo SA (Pty) Ltd, in Virginia, RSA;
- ✎ Environmental manager for over viewing compilation of EMPR, EIA, and other permitting requirements for Exarro KZN Sands;
- ✎ EMPR review and consolidation, and enviro-legal gap analysis for Mogale Gold;
- ✎ Preparation of an Environmental Management Programme Report (EMPR) and Environmental Impact Assessment (EIA) for the proposed Loopspruit open cast coal mine, Mpumalanga, RSA;
- ✎ EMPR for a Gold mine and associated developments (including the tailing dams) in Schweizer Reinecke, North West, RSA;
- ✎ EMPR for a new underground shaft and associated building and waste rock disposal site for Lonmin Western Platinum, North West, RSA; and
- ✎ Mining Permit applications and associated Environmental Management Plans (EMP) for numerous borrow pits for the Gauteng Freeway Improvement Project, Gauteng, RSA.



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# EIMS SERVICES AND EXPERIENCE

## STRATEGIC ENVIRONMENTAL PLANNING

Integrated environmental management (IEM) is a concept which has been promoted in South Africa since the late 1980s. Many of the IEM tools are only recently emerging in South Africa. Consideration of the environment at the pre-feasibility and planning stages of any project is one of the ultimate objectives of certain of the identified IEM tools. EIMS is ideally suited and experienced in providing consulting services for the design and implementation of these IEM tools with specific provision of the following services:

- Strategic Environmental Assessments;
- Environmental Management Frameworks;
- Environmental planning and policy development;
- Scenario assessments; and
- State of the environment reporting.

EIMS has experience in carrying out strategic environmental assessment and planning for numerous government departments as well as carrying out pre-feasibility and feasibility investigations for large infrastructure developments. Examples of past projects of this nature are provided below:

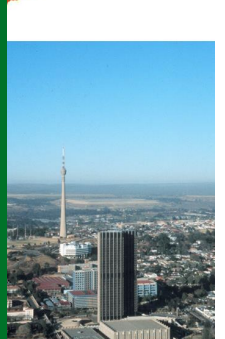
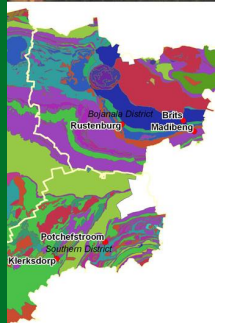
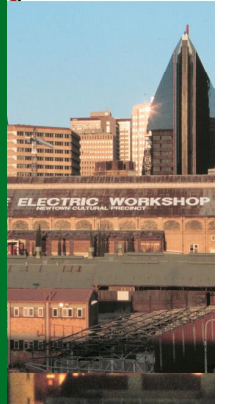
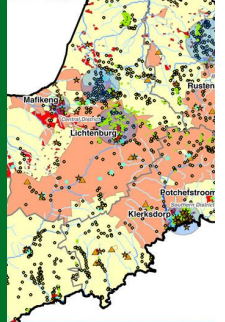
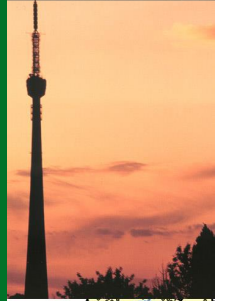
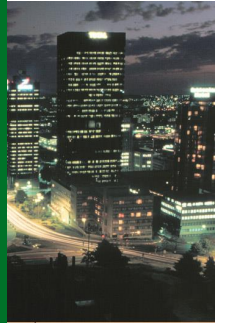
- Strategic Environmental Assessment for Hartebeespoort Dam, RSA;
- Strategic review of the obligations of the Department of Science and Technology with regard to Multilateral Environmental Agreements;
- Specialists to Transaction Advisors for Public Private Partnerships (incl: Department of Foreign Affairs Head Office; DME IPPs; Eastern Cape Department of Public Works Bisho and Mt Alyff Head Offices; Chris Hani Baragwaneth Hospital Upgrade);
- Environmental Outlook for the North West Province, North West, RSA;
- Strategic Environmental Assessment for the proposed Wemmer Pan Precinct, Gauteng, RSA; and
- Pre-feasibility and feasibility investigations for two new Gas fired Open Cycle Gas Turbines in Eastern Cape and KwaZulu Natal, RSA.



## ABBREVIATED CLIENT LIST

EIMS has been practicing at the forefront of environmental management consulting in South Africa for the past 15 years and has built up an unprecedented array of clients (both government institutions and private companies) and projects. An abbreviated client list is provided below:

- ARUP;
- African Exploration Mining Finance Corporation;
- Cape Gate;
- Distell;
- Eskom;
- Frazer Alexander;
- Gauteng Department of Public Works, Roads and Transport;
- Goba ;
- Group 5;
- Internet Solutions;
- IBM;
- IRCA;
- Johannesburg Roads Agency;
- Kagiso Financial Services;
- Lesotho Highlands Development Authority;
- Lonmin;
- Mogale Gold;
- Molopo Exploration and Production
- Murray and Roberts;
- North West Province Department of Agriculture, Conservation and Environment;
- Old Mutual Investment Group;
- Parsons Brinckerhoff;
- Rand Water;
- Roshcon;
- Sasol;
- Sentech;
- Spoornet;
- South African Department of Minerals and Energy;
- South African Department of Foreign Affairs;
- South African Department of Science and Technology;
- South African National Roads Agency Limited;
- South African Nuclear Energy Corporation
- Turner Townsend;
- Transnet;
- Total South Africa;
- Venmin;
- Vesuvius SA;
- WBHO; and
- Webber Wentzel Attorneys.





## Environmental Impact Management Services (Pty) Ltd

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Randburg, South Africa, 2194

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Fax: +27 11 787 3059

Unit 1, 12 Clifford Street, Quigney, East London,  
South Africa, 5201

P.O. Box 19731, Tecoma, 5214

Tel: +27 43 722 7572

Fax: +27 86 571 9047

E-mail: [mail@eims.co.za](mailto:mail@eims.co.za)

World Wide Web: [www.eims.co.za](http://www.eims.co.za)

Directors: L. Whitlow (Managing)

A. Smith





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## CURRICULUM VITAE

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Name	<b>Bradley Wilson</b>
Nationality	South African
Date of Birth	07.07.1977
Driver's License	Code 8
Profession	Environmental Consultant
Current Position	EIMS Mining Division: Senior Environmental Scientist & Associate Project Manager
Specialisation	Ecology & Rehabilitation
Current Employer	Environmental Impact Management Services (Pty) Ltd

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### Key experience

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- Environmental Compliance Monitoring and Auditing;
  - Environmental Due Diligence Assessment;
  - Equator Principles, IFC Performance Standards and World Bank EHS Guidelines Reviews and Audits;
  - Environmental Risk Advisory Services;
  - Environmental Impact Assessment;
  - Environmental Management Plans;
  - Integrated Water and Waste Management Plans;
  - Mining related services including;
    - Integrated NEMA/MPRDA EIA processes;
    - Environmental Risk Assessments;
    - Mine Closure Risk Assessments;
    - MPRDA Performance Assessments;
    - Environmental Due Diligence; and
    - General Environmental Advisory Services.
- 

### Qualifications

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<b>Philosopher of Science (Ecology)</b> Currently in Abeyance	University of the Witwatersrand 2003 - 2015
--	--

<b>Master of Science (Ecology)</b> Qualified With Distinction	University of the Witwatersrand 2001 - 2003
--	--

<b>Postgraduate Diploma in Science</b> Qualified With Distinction	University of the Witwatersrand 2003
--	---

#### **Majors:**

Conserving Biodiversity: Foundations  
Conserving Biodiversity: Frontiers  
Sustaining Populations and Resources  
Maintaining Ecosystem Processes: Frontiers  
Biostatistics and Research Design

Qualified	1999
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B.G. Wilson

**Majors:**

Botany, Zoology, Mathematics, Chemistry

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**Professional Registrations**

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Registered Professional Natural Scientist: (Environmental Science & Ecological Science)

(SACNSP-#400248/13)

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**Key Work Experience**

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**Environmental Due Diligence**

- Environmental Due Diligence including IFC and Equator Principles audit for the Letseng Diamond Mine in Lesotho (Gem Diamonds);
- Environmental Due Diligence including IFC and Equator Principles audit for the proposed Makhado Coal Mine in Limpopo (Coal of Africa);
- Environmental Due Diligence including IFC and Equator Principles audit for the Boikarabelo Coal Mine in Limpopo (Resgen).

**Equator Principles, IFC Performance Standards and World Bank EHS Guidelines Audits**

- Lead Auditor: Bi-Annual audits of Authorisations, Licenses, EMP, IFC and Equator Principles for the Amakhala Emoyeni RE Project 1 Wind Energy Facility;
- Lead Auditor: Bi-Annual audits of Authorisations, Licenses, EMP, IFC and Equator Principles for the Tsitsikamma Community Wind Energy Facility;
- Quality Assurance: Quarterly audits of Authorisations, Licenses, EMP, IFC and Equator Principles for the Ingula Pumped Storage Scheme (ongoing).

**Independent Environmental Auditor**

- Lead External IWUL Auditor for Continental Coal Penumbra Mine;
- Lead External IWUL Auditor for Continental Coal Delta Wash Plant;
- Lead External IWUL Auditor for Continental Coal Delta Wash Plant;
- External IWUL Auditor for Continental Coal Ferreira Coal Mine;
- Lead External IWUL Auditor for Pembani Coal Mine;
- Project Manager and Independent Environmental Control Officer for PH Bagale, Stefanutti Stocks Douglas - Hopetown road construction.

**Performance Assessments**

- Lead External Auditor for Continental Coal Penumbra Mine EMPR Performance Assessment;
- Lead External Auditor for Rooiberg Minerals Buffalo Mine EMPR Performance Assessment.

**Environmental Risk Advisory Services**

- Senior Risk Advisor to Royal Bafokeng Administration;  
The specific role in this project is reviewing all the operations operating on RBN owned land and identifying high level risks and advising the landowner on strategies for managing their tenants to ensure they operate in a socially and environmentally responsible manner and to ensure that legal and environmental liabilities are not transferred to the landowner.

B.G. Wilson

### **EIA Processes**

- Project Manager and Senior Environmental Assessment Practitioner (EAP) for Mashala Hendrina Coal De Wittekrans Mine EIA. 2015. DARDLEA Environmental Authorisation Granted.
- Senior Environmental Assessment Practitioner (EAP) for Mashala Resources Leiden Mine EMPR Continental Coal De Wittekrans Mine EIA. 2015. DARDLEA and DEA Environmental Authorisations Granted.
- Senior Environmental Assessment Practitioner (EAP) for Mashala Resources Vlakplaats EIA and EMPR 2013.

### **IWULA Processes**

- Project Manager and Senior Environmental Assessment Practitioner (EAP) for Exxaro Paardeplaats Coal Mine IWULA and IWWMP. 2015. Underway.
- Project Manager and Senior Environmental Assessment Practitioner (EAP) for Mashala Resources Leiden Mine IWULA and IWWMP. 2015. Underway.

### **Mine Closure**

- Senior Environmental Assessment Practitioner (EAP) for Transnet Capital Projects Borrow Pit Closures;
- Project Manager and Senior Environmental Assessment Practitioner (EAP) for Royal Bafokeng Holdings Borrow Pit Closures.

### **Prospecting Rights**

- Senior Environmental Assessment Practitioner (EAP) for MOK projects Prospecting Right Application
- Project Manager and Senior Environmental Assessment Practitioner (EAP) for Chlookop Gypsum Prospecting Right EMP;
- Project Manager for West Wits/Mintails Prosepcting Right Application EMP update;

### **Environmental Officer**

- Environmental Officer for Phase 2 of the Transnet Durban Container Terminal (DCT) Project - Transnet Capital Projects

### **Environmental Control Officer (ECO)**

- Project Manager for Transnet Capital Projects Independent Environmental Control Officer for Mahatma Gandhi Road Upgrade;

### **Earlier Career**

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Full time Environmental Control Officer (ECO) for the Transnet NMPP Project – Environmental Impact Management Services | Randburg | South Africa.

Period of Employment: January 2009 to February 2012

The project comprises the following major aspects:

- Pipeline 1: 554km of pipeline construction (30m wide servitude) from Durban Harbor (Island View) to Heidelberg (Gauteng) including construction of 2 Fuel Terminals, 3 Pump Stations and 2 Metering Stations.
- Pipeline 2&3: 72km of Pipeline construction (30m wide servitude) from Jameson Park Terminal (Gauteng) via Alrode Terminal to Langlaagte Depot (Gauteng).
- Pipeline 4: 89km of Pipeline construction (30m wide servitude) from Kendal Power Station (Mpumalanga) to Waltloo Terminal (Gauteng).

B.G. Wilson

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**Language capability**

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	<b>Speaking</b>	<b>Reading</b>	<b>Writing</b>
English	Excellent	Excellent	Excellent
Afrikaans	Poor	Fair	Fair

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**Signature**

**Date**



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2015-12-09

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## CURRICULUM VITAE

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Name:	Elizabeth Cooper
Nationality:	South African
Date of Birth:	20.09.1988
Profession:	Environmental Consultant
Current Position	Environmental Scientist
Specialisation	Remediation and Sustainable Development
Current Employer:	Environmental Impact Management Services (Pty) Ltd

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### Key Experience

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An environmental consultant with 3 years of experience. Her experience includes:

- Environmental Compliance Monitoring;
  - Mining Environmental Rights and general Mineral Tenure;
  - Environmental Impact Assessments;
  - Prospecting Right Applications;
  - Environmental Management Plans; and
  - General Environmental Advisory Services.
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### Qualifications

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**Bachelor of Science With Honours (Environmental Management)** University of the North West  
Qualified 2010

**Bachelor of Science (Geography and Environmental Management)** University of Johannesburg  
Qualified 2009

***Majors:***

Environmental Management and Geography

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### Career Summary

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#### EMPR for Offshore Hydrocarbon Exploration - Silver Wave Energy (PTE) Ltd

**Name of Company:** Silver Wave Energy (PTE) Ltd

**Timeframe:** January 2014 to June 2014

**Responsibilities: Senior Consultant**

Environmental Impact Assessment for offshore seismic exploration including the following major aspects:

- Preparation of an exploration EMPlan in accordance with the MPRDA;
- Management of external environmental specialists including review specialist reports for EMPlan;
  - Marine Fauna; and
  - Fisheries
- Conducting Public Participation Process (PPP) for MPRDA requirements.

### **Key Achievements:**

- Experience with management of environmental specialists and review of specialist reports;
- Experience with development of Exploration EMPlan;
- Experience with authority consultation for MPRDA exploration process;
- Experience with the Public Participation Process in accordance with MPRDA requirements;

### **Environmental Advisor to the Royal Bafokeng Nation (Royal Bafokeng Holdings)**

**Name of Company:** Environmental Impact Management Services (Pty) Ltd.

**Timeframe:** July 2012 to present

#### **Responsibilities: Senior Consultant**

Environmental advisor. The specific role in this project is reviewing all the operations operating on RBN owned land and identifying high level risks and advising the landowner on strategies for managing their tenants to ensure they operate in a socially and environmentally responsible manner and to ensure that legal and environmental liabilities are not transferred to the landowner. Specific responsibilities include:

- Review of environmental documentation pertaining to operations on RBN owned land including:
  - Licenses, authorisations, permits;
  - EIAs and EMPs;
  - Review of Environmental Management Systems;
  - Review of environmental monitoring data and monitoring reports;
  - Participation in committee meetings with tenants as advisor to the RBN;
  - Site inspections to assess social and environmental performance;
  - Preparation of legal interpretations for the landowner;
  - Review of leases and inclusion of environmental conditions in all new lease agreements;
  - Preparation of environmental review reports for the client;

### **Key Achievements:**

- Experience with environmental review (essentially high level due diligence) processes;
- Experience with a wide range of environmental legislation and preparation of legal opinions;

### **EMPR for Paardeplaats Coal Mine - Exxaro**

**Name of Company:** Environmental Impact Management Services (Pty) Ltd.

**Timeframe:** October 2012 to July 2014

#### **Responsibilities: Senior Consultant**

Environmental Impact Assessment for Coal mine including the following major aspects:

- Preparation of a Scoping Report in accordance with the MPRDA and National Environmental Management Act (Act No. 107 of 1998)(NEMA);
- Preparation of an Environmental Impact Assessment Report (EIAR) and EMPR in accordance with the MPRDA and NEMA;
- Management of external environmental specialists including review specialist reports for Scoping Report, EIAR and EMPR;
  - Air quality;
  - Fauna specialist;
  - Flora specialist;
  - Wetland specialist;
  - Soils and land use, land capability specialist;
  - Geohydrology specialist;
  - Geochemistry specialist;
  - Noise specialist;
  - Social specialist;

- Traffic specialist;
- Heritage specialist;
- Blasting specialist;
- Rehabilitation specialist
- Conducting Public Participation Process (PPP) for NEMA, MPRDA and Integrated Water Use License (IWULA) processes.

**Key Achievements:**

- Experience with management of environmental specialists and review of specialist reports;
- Experience with development of EIAR and EMPR reports;
- Experience with authority consultation for NEMA, MPRDA and NWA processes;
- Experience with the Public Participation Process in accordance with MPRDA, NEMA and National Water Act (NWA) requirements;

**New Multi Product Pipeline (NMPP) Project – Independent Environmental Control Officer**

**Name of Company:** Environmental Impact Management Services (Pty) Ltd.

**Position Occupied:** Independent Environmental Control Officer (ECO)

**Period of Employment:** April 2011 – May 2012

The project comprises the following major aspects:

- Pipeline 1: 554km of pipeline construction (30m wide servitude) from Durban Harbor (Island View) to Heidelberg (Gauteng) including construction of 2 Fuel Terminals, 3 Pump Stations and 2 Metering Stations.
- Pipeline 2&3: 72km of Pipeline construction (30m wide servitude) from Jameson Park Terminal (Gauteng) via Alrode Terminal to Langlaagte Depot (Gauteng).
- Pipeline 4: 89km of Pipeline construction (30m wide servitude) from Kendal Power Station (Mpumalanga) to Waltloo Terminal (Gauteng).

**Responsibilities:** The following responsibilities apply to this position and are based on the conditions of the Environmental Authorisation, EMP and client contract:

- Daily (full-time) environmental compliance monitoring, audits and inspections;
  - Monitoring and reporting on compliance with all conditions of the Environmental Authorisation (EA), permits, licenses, and EMP etc.
  - Submission of daily, weekly and monthly audit reports;
  - Maintenance of a photographic record of any damage to areas outside the demarcated site area. The date, time of damage, type of damage and reason for the damage is recorded in full to ensure the responsible party is held liable;
- Investigating and reporting on major environmental incidents;
- Maintenance of a non-compliance and incident register;
- Recommend corrective action for any non-compliance incidents on the construction site;
- High Level Environmental awareness training;
- Review and approval of Environmental Awareness Training to be undertaken by the contractors or other suitable service providers.
- Communication and interaction with Contractors, Sub-contractors, Project Managers, Resident Engineers, Landowners and Authorities in matters relating to the environment;
  - Educate the construction team about the management measures of the EMP's and ROD's/EA's;
  - Regular liaison with the construction team and the site manager;
  - Consult with the I&AP's and the contractor where required by the EMP;
  - Ensure open communication channels between the affected parties and the contractor and respond promptly to queries and claims;
  - Provide ad hoc advise and clarification on compliance issues to the responsible contractor;

- Participation in Community Liaison Forum meetings - includes environmental presentations;
- Assist the contractors in the identification of suitable contractors camp sites and delineation of environmental sensitive areas;
- Rehabilitation monitoring;

**Key Achievements:**

- Gained understanding and experience in implementation of Environmental Management Plans;
- Experience with environmental monitoring programmes – soil and water sampling;
- Experience in compliance monitoring and reporting;
- Communication skills:
  - Environmental training
  - Ad hoc one-on-one environmental training with workers on site
  - Written communication skills – reports, email communication
  - Gained experience dealing with Contractors, Sub-contractors, Project Manager, Resident Engineers, Landowners and Authorities
- Familiarity with wide range of Environmental Legislation;
- Experience with Enviro-Legal analysis and interpretation (preparation of enviro-legal opinions);

**Language capability**

	<b>Speaking</b>	<b>Reading</b>	<b>Writing</b>
English	Excellent	Excellent	Excellent
Afrikaans	Poor	Fair	Fair

**Signature**

**Date**

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