

GRANT BERINGER

Mr Grant Beringer
Manager: Biophysical Department
Digby Wells & Associates

EDUCATION

2004 - 2006: MSc in Environmental Management – University of Johannesburg (UJ)
2002 – 2003: BSc Hons. Geography and Environmental Management – Rand Afrikaans University (RAU)
2000 – 2002: BSc Earth Sciences, Majoring in Geography & Environmental Management and Geology (RAU)

EMPLOYMENT

October 2003 – March 2007: Digby Wells and Associates, as an Environmental Scientist
March 2007 – November 2008: Digby Wells and Associates, as Unit Manager
November 2008 – Present: Digby Wells and Associates, as Manager of the Biophysical Department

EXPERIENCE

Whilst at Digby Wells I have been extensively involved in the management of the Environmental Impact Assessment (EIA) process as well as with the compilation of Environmental Management Plans (EMP). I have also compiled numerous Prospecting Right Applications, Liability Assessments and Water Use Licenses. In addition I have experience in conducting due diligence investigations, closure costs assessments and EMP compliance auditing. This has included work in Botswana, Namibia, Zambia, Guinea and South Africa. The projects I have worked on have covered various minerals, including gold, silver, copper, cobalt, nickel, and coal.

Special areas of interest include Project Management, Closure Liability Assessments and Closure Cost Estimations. Some of the Projects completed in this regard are:

- Harmony Gold Closure Cost Assessment (Project Manager): Completed a closure cost assessment for all Harmony Gold's Operations (for the last 4 years).
- Harmony Gold Closure Cost Rate update: (Project Manager) Harmony Gold's rates were updated through investigation into the various industries related to mine closure and rehabilitation.
- Sasol Mining Rate update (Project Manager): Sasol's rates for mine closure were reviewed and updated to ensure they were accurate.
- Sasol Mining Closure Model review and Update (Project Manager): Sasol's closure cost estimation model was updated to provide ease of use and to make certain that all liabilities were accounted for. The model was also updated to provide summary sheets and allow for cross referencing.

- National Manganese Mines (Project Manager): A liability assessment for National Manganese's Morokwa Mine in the Northern Cape was completed. The assessment was conducted to evaluate the current closure methods, provide recommendations for closure and update methodologies adopted by the mine.
- Richards Bay Coal Terminal: Completed the liability and closure cost assessment for Richards Bay Coal Terminal.
- Closure and Rehabilitation Assessments for prospecting: Numerous prospecting closure and rehabilitation costs have been calculated for operations throughout Southern Africa. The relevant guidelines and standards were used to calculate these costs accurately.
- Foskor Zirconia EIA/EMP authorisation (Project Manager): Completion of the EIA and EMP for Foskor Zirconia under the NEMA regulations.
- ERGO Mining (Pty) Ltd – Benoni and Elsburg Dump Recclamation Projects (Project Manager): The completion of the EIA/EMPs for the two areas under the MPRDA regulations. The project involved managing the Public Participation Process, Project Meetings and resource allocation and management.

A number of due diligences have been completed locally and in Africa, Zambia (2) and Namibia.

PRESENTATIONS

- A presentation at the International Soil Erosion Conference 2005 was given on the efficiency of certain structures in curbing or preventing soil erosion.
- Three presentations at the Minerals and Energy Training Institute, Mintek.
- Hosted the pre-conference workshop of the 3rd Annual Mine Closure and Rehabilitation Conference in South Africa.

IRENE BOPP

Miss Irene Bopp
Environmental Consultant
Digby Wells & Associates

EDUCATION

2005-2008 :MSc Aquatic Health – University of Johannesburg
2004 : BSc Hons, Aquatic Health – University of Johannesburg
2000 – 2003 :BSc Environmental Sciences with majors in Zoology and Botany–
Rand Afrikaans University

CERTIFICATIONS

2008 : SASS 5 Accreditation- DWAF

EMPLOYMENT

April 2008 -	Digby Wells & Associates
Feb 2008-April 2008:	Nemai Consulting; Environmental Consultant
Aug 2007 – Feb 2008:	RPS Group UK; Freshwater Biologist
Jan 2006 – March 2007:	Econ@UJ; Water Quality Consultant

EXPERIENCE

I am currently employed at Digby Wells and Associates, and Environmental Solutions provider. I am part of the Environmental Services Department. The projects I have played a role in are in the mining and water treatment industries. I have been responsible for Environmental Impact Assessments (EIA), Integrated Water Use licence Applications, Mining Right Applications, Mining Right Conversions, as well as project management for this field.

At Nemai Consulting I was responsible for carrying out of EIA as well as policy and strategy department with the Department of Water Affairs and Forestry (DWAF), specifically the environmental pillar for the new proposed strategy, Water for Growth and Development (WfGD). The EIA's included a low cost housing development, a large proposed 'One Planet Living' style development as well as concluding an EIA for a proposed bush camp within the Klipsrivierberg Nature Reserve.

At RPS Group. I was part of the Planning and Development team and was involved in Combined Sewerage Outfall assessment, which includes ecological, morphology, aesthetic and water quality assessment of 161 outfalls and the receiving water, for the leading water provider for the west of the UK, Wessex Water. I also played a role in the assessment of development impacts on aquatic ecosystems assessed the

opening of culverted channels within development sites and the potential impact on the establish ecosystems.

I was previously contracted for a two year project (leading to my Masters) in association with Sappi Paper, to research the impact of three mills on the three rivers which the mills are situated on. Abstraction as well as discharge of the effluent from the processes occurs within these rivers. The project was team based, whereby I was assigned a freshwater system, the Thukela River (KZN), as well as being responsible for the water quality aspect of the project which entailed the toxicity testing of the effluents of the three mills, which include the Algal inhibition test, Ames mutagenicity test, fish acute toxicity test, Daphnia (invertebrate) acute and chronic toxicity test. Biological Oxygen and Chemical oxygen demand was also assessed. Site surveys consisted of fish biomonitoring, macro-invertebrate biomonitoring, sediment analysis and water quantity analysis at each site.

At Econ@uj I would run water quality tests, Algal inhibition tests, AMES mutagenicity tests, fish and Daphnia toxicity tests as well as field surveys which included fish assessment, macro-invertebrate assessment and sediment assessment.

Thomas Wilson

Thomas Wilson

Environmental Scientist

Digby Wells & Associates (Pty) Limited

EDUCATION

- 2008 – 2009: BSc Hons. Geography & Environmental Management –
University of Johannesburg (UJ)
- 2005 – 2007: BSc Geography & Environmental Management –
University of Johannesburg (UJ)
- 2003: Matriculated at the Deutsche Schule zu Johannesburg¹

EMPLOYMENT

- February 2008 – present: Digby Wells and Associates (DWA) as an Environmental
Scientist
- 2004: Boomkwekeryij vd Starre bv, Boskoop (Netherlands) as a
Production Line Assistant

EXPERIENCE

My current employment at Digby Wells and Associates as an Environmental Scientist requires me to compile various environmental reports in accordance to various regulations. Experience gained at DWA includes the undertaking of various Environmental Impact Assessments (EIA), Environmental Management Plans (EMP) and Basic Assessment applications. In addition I have experience in EIA and EMP document compilation, prospecting and mining rights and closure cost assessments. Some of the Projects completed in this regard are the following:

- Ananke Mineral Resources Prospecting Applications: Completed prospecting applications situated in the Limpopo Province;
- Eastern Platinum Limited Closure Cost Assessment: Completed a closure cost assessment for all of Eastplat's Operations;
- Harmony Gold Closure Cost Assessment: Completed a closure cost assessment for all Harmony Gold's Operations;
- Mashala Resources Closure Cost Assessment: Completed a closure cost assessment for all of Mashala's operations;

¹ German School in Johannesburg, South Africa

- Orange Farm Metals cc Housing Development: Compiled a Basic Assessment Report for a housing development in Orange Farm; and
- Shell South Africa Environmental Impact Assessments: Completed numerous EIA's for the upgrade of their service stations.

Jennifer Balatedi Molwantwa (PhD; Pr. Sci. Nat.)

Unit Manager: Integrated Hydrology; Water Scientist

Digby Wells and Associates

Commissioner: National Planning Commission of South Africa

Office of the Presidency, South Africa

EDUCATION Rhodes University (1994 to 2008)

2008 PhD Science (Biotechnology)
2003 MSc (Biotechnology)
2000 BSc Hons. (Biotechnology)
1999 Postgraduate Diploma in Enterprise Management
1998 BSc (Microbiology / Chemistry)

PROFESSIONAL AFFILIATIONS

South African Council for Natural Scientific Professions (SACNASP)

Water Institute of Southern Africa (WISA)

EMPLOYMENT

2009 - Date Digby Wells & Associates (DWA) - Unit Manager: Hydrology
2008 – 2008 Digby Wells & Associates (DWA) - Water Scientist
2006 – 2008 Golder Associates Africa (GAA) & Zitholele Consulting - Water Scientist
2002 – 2004 Pulles Howard and de Lange (PHD) - Research Assistant

EXPERIENCE

Extensive research and development (R&D) experienced gained at Rhodes University's Environmental Biotechnology Research Unit (EBRU) in the biological treatment of mine water using both passive and active treatment systems.

Responsibilities as Unit Manager: Hydrology include managing 2 staff members and seeing to unit operation.

Other project related experience/technical specialties include - water quality assessment, Reserve determination (Vaal and Inkomati systems), specialist surface water and hydrological input into EIA/EMP, state of environment reporting (North West Province), Storm Water Management Plans (SWMP), Integrated Waste and Water Management Plans (IWWMP), Integrated Water Use License Applications (IWULA) and water use license and water management compliance audits.

HELEN KNIGHT

Ms. H Knight
Public Participation Practitioner
Digby Wells & Associates

EDUCATION

Certification course (Techniques for Effective Public Participation) (IAP2) 2007
Certification course Communications for Effective Public Participation) (IAP2) 2007
Certification course (Planning for Effective Public Participation) (IAP2) 2007
Certification course (Meaningful Community Engagement) (CSMI) 2007
Certification course (Management Programme in Environment and Sustainability Mining) (Meeti/Wits University), 2006
Certification course (Conflict Management in Public Involvement within Environmental Impact Assessments (Potchefstroom University) 1999
Short courses and Certificates (various throughout career) (Different organisations) 1974 – 2006)

EMPLOYMENT

May 2006 – present.	Digby Wells and Associates. Public Participation Manager
May 2001 – 2006	Network Rail, Accident Investigation. Accident Investigator
September 1996 – 2001	SRK Consulting, Environment Department. Public Participation Technical Assistant; previously Department Administrator
January 1974 - 1996	Banking Industry, Various departments, last position Credit Manager

ASSOCIATIONS

IAP2: Member of the International Association for Public Participation

EXPERIENCE

I have experience in the field of public participation and conflict management, public participation processes, social scans, scoping, environmental impact assessment phases through to authorisation regarding stakeholder engagement. I have been the public involvement co-ordinator/ manager on several large projects which included the design, planning and co-ordination of open-day workshops, public meetings etc.

Since joining Digby Wells I have written a number of reports and have been responsible for the formulation of public participation processes, implementation of public participation processes, facilitation of meetings and other aspects in relation to this sector. I initiated and am responsible for the management of the Lotus data capture management system established as part of the public participation component and grievance procedures.

Project Experience:

- Public Participation Manager for the PCDP Etoile Copper Mine project, Lubumbashi, Democratic Republic of the Congo.
- Public Participation Manager for the PCDP Mmamabula Energy Project, Central District, Botswana.
- Public Participation Manager for the PCDP Bonwapitse Wellfield Project, Central District, Botswana.
- Public Participation Manager for the PPP Tselentis Greenfields Project, Ermelo, Mpumalanga.
- Public Participation Manager for the PPP Eastplats Crocodile River Mine Smelter Project, Brits, North West Province, and many more projects.

Stephanie Crone

Stephanie Crone
Environmental Consultant (GIS)
Digby Wells & Associates

EDUCATION

2003 – 2005: BSc Geography and Informatics with Financial Orientation at University of Johannesburg

Major subjects: Geography; Informatics

Ancillary subjects: Mathematics, Analytical Techniques, Financial Management, Accounting, Business Management

2006: BSc (Hons) Geography (cum laude) at University of Johannesburg

Major subjects: Philosophy and Research Methodology; Strategic Environmental Planning; Geographic Information Systems (GIS); Urban Geography; Geomorphology

2007: Introduction to ArcGIS I (GIMS)

2008: Geodatabase Design Concepts (GIMS)

2008: Building Geodatabases (GIMS)

AFFILIATIONS

Geographic Information Society of South Africa (GISSA)

EMPLOYMENT

January 2007 – August 2009: Statistics South Africa

September 2009 to present: Digby Wells & Associates

EXPERIENCE

I have experience in using Geographic Information Systems (GIS) as a digital cartographic and spatial analytical tool. As a GIS Specialist at Statistics South Africa I was responsible for maintaining the geodatabase and I gained experience working with vector data, aerial photography and satellite imagery. I was responsible for the data preparation and mapping for the Community Survey 2007 Digital Atlas CD. I assisted with map production for surveys and user requests for spatial data. I also worked on the Dwelling Frame Project, Placename and Enumerator Area Demarcation.

My responsibilities at Digby Wells & Associates currently include but are not limited to:

- Generation of maps for projects;
- Assisting with the maintenance of the GIS databases by storing all electronic files in a well organized structure;
- Expanding and improving the GIS databases by identifying gaps and sources of additional mapping data;
- The production of spatial information in map format;
- Application of GPS technology, aerial photo and satellite images.
- Assessing digital databases to ensure a high level of accuracy of data available at all times;
- Spatial analyses relating to environmental projects.