# **Appendix A**

### **EAP CV AND QUALIFICATIONS**

11.



Education Ph.D. (Botany), University of Natal, South Africa

B.Sc. (Hons, Botany), University of Natal, South Africa

B.Sc. (Botany, Zoology), University of Natal, South Africa

#### Languages

Afrikaans – Fluent

English – Fluent

#### Johannesburg

#### Principal, Project Director and Strategic Advisor

Dr Brent Baxter is WSP's Environmental Technical Lead in Africa. He has a PhD in Natural Sciences and brings more than 25 years' experience as an environmental professional within the mining industry and in leading consulting teams on projects across Africa. He has worked in more than 20 African countries. Brent has depth of expertise in mine closure, rehabilitation planning, environmental and social impact assessment and the requirements of international lenders.

Brent has lead key parts of WSP's Africa business and currently leads WSP's Mining Environmental team in Africa with staff in four geographies in South Africa and in Mozambique, Ghana and Zambia/DRC. He has previously co-ordinated and lead WSP's ESIA Technical Community. Brent is also currently a Trustee of the WSP Trust for Orphans.

Brent's passion lies in bringing his broad environmental understanding to bear to influence project planning, and improve project sustainability across a range of sectors including mining, Oil and Gas, Energy, Infrastructure and Agriculture.

#### **Employment History**

#### WSP Group Africa (Pty) Ltd – Johannesburg, South Africa

Strategic Advisor, Planning & Advisory. (2002 to Present) Provides Strategic Leadership to WSPs Environmental Assessment teams in Africa. Previously managed WSPs Planning & Advisory Business Unit comprising of over 70 staff in five offices in Africa grouped in specialist teams in the fields of ESIA, Stakeholder Consultation, Social Assessment and Resettlement Planning and Land Development.

Project Director and senior advisor in the fields of environmental impact assessments, development of environmental management plans, environmental compliance and due diligence auditing, lender compliance against equator principles and international performance standards, rehabilitation and restoration planning, mine closure, ecological assessments, biodiversity management planning and environmental monitoring.

#### Wates, Meiring and Barnard – Johannesburg, South Africa Environmental Scientist then Associate (2001 to 2002)

Responsible for environmental consulting services to the mining industry covering environmental impact assessments, development of environmental management plans, environmental auditing, rehabilitation and restoration planning, mine closure, ecological assessments and environmental monitoring.

#### Envirogreen Consulting – Johannesburg, South Africa Managing Director and Director (1998 to 2001)

Responsible for co-ordination and management of consulting services to the mining industry covering mine closure, rehabilitation and restoration planning and

contaminated site assessment.

#### Envirogreen – Potchefstroom, South Africa

Rehabilitation Research Scientist, then Consulting & Research Manager (1997 to 1998)

Responsible for development and implementation of rehabilitation trials and initiation of a small consulting group focussed on rehabilitation and restoration planning and mine closure.

#### Anglo Coal Environmental Services – Witbank, South Africa

Assistant Scientific Officer, then Environmental Engineer (1994 to 1997)

Responsible for advising Anglo Coal opencast and underground mines on a broad range of environmental issues and completion of various technical studies including post mining land rehabilitation planning, cleanup and restoration of contaminated sites, environmental impact assessments, environmental management plans and environmental audits. Managed Anglo Coals rehabilitation research programme and developed and implemented trials to facilitate the re-establishment of native species.

#### University of Natal – Pietermaritzburg, South Africa

#### Researcher (1990 to 1994)

Carried out research programme towards PhD. Research was focussed on ecophysiological aspects of seed dormancy, germination and the establishment of native southern African grasses, particularly the climax species Themeda triandra. Developed techniques for the successful re-establishment of native grasses into disturbed habitats.

#### **PROJECT EXPERIENCE – OIL & GAS**

CNOOC, Kingfisher Field Development Uganda	Project manager and ESIA lead: full field development including Wells, CPF and 50 km distribution pipeline in remote Western Uganda.
CGG, Seismic Mozambique	Project director: multiple EIAs for offshore seismic acquisition, Mozambique
Sasol, Block 16/19, PT5C Mozambique	Project director: EIA for shallow water marine seismic acquisition and appraisal well development, EIA for onshore seismic acquisition, Mozambique
Sasol, GTP Project	Project Director; ESIA for gas to power plant permitting. Project entails EIA of power plant, incoming and outgoing linear infrastructure and beach landing of heavy plant and infrastructure.
<b>Mozambique Gas</b> Mozambique	Project Director and Technical Lead on gas power plant permitting. Project entails envronmental impact assessment of power plant, incoming and outgoing linerar infrastructure and beach landing of heavy plant and infrastructure for construction.
Karoo Gas Project, Shell Upstream International	Project manager and technical lead assisting Shell in the siting of potential exploration well sites. Project entailed use of existing National GIS datasets to inform development of a GIS spatial model that spanned the 90,000 km <sup>2</sup> exploration area. This model was used to inform positioning of exploration wells in order to minimise potential environmental impact prior to commencement of exploration. Required close collaboration between Golder technical team and Shell exploration team.
Karoo Gas Project,	Project director and senior review for development of three environmental management programs in support of Shells three Karoo gas exploration permits totalling 90,000 km <sup>2</sup> . Work entailed development of environmental management programs, high-level evaluation of potential impacts and consultation with stakeholder communities to build capacity and understanding of unconventional gas development, including hydraulic fracturing technology
Waterberg Gas Project, Anglo Coal	Project director for the successful permitting of a 37 well bulk CBM gas yield test well-field. The project included permitting of reverse osmosis water treatment plant and associated waste handling infrastructure. The project is located in the Waterberg coalfield, Limpopo province, South Africa
Waterberg Gas Project, Anglo Coal	Project director for third-party review of specialist groundwater report. The report which was the subject of the technical review had been independently commissioned by the Petroleum Agency of South Africa and evaluated long-term groundwater monitoring data in proximity to Anglo Coals CBM five spot test sites in the Waterberg coalfield.
Technical Study Tour, Unconventional Gas Developments, USA and Canada USA and Canada	While not technically a project it is relevant to include in this experience record that Brent has spent three weeks, during mid-2012, travelling through parts of the USA and Canada where unconventional gas development is taking place. The focus of this study tour, funded entirely by Golder, was to meet with regulators, developers, contractors and members of civil society to discuss and understand how learnings from UCG and CBM development in these regions could be applied to the growing number of UCG / CBM projects in Southern Africa.

### PROJECT EXPERIENCE – SITE CLOSURE, DECOMMISSIONING AND REHABILITATION PLANNING

Various clients Africa	Project director and senior review on multiple mine closure plans, preliminary closure plans, closure cost determinations and rehabilitation strategies for mining sites in Africa
Department of Minerals and Energy	Project co-ordinator for technical and economic feasibility of controlling underground coal fires, stabilisation of unsafe ground and rehabilitation of the defunct Transvaal and Delagoa Bay Colliery. Conducted for the South African Department of Minerals and Energy. [Witbank, South Africa].
United Nations Mission in Kosovo	Specialist contributions related to rehabilitation of lead / zinc tailings involving site assessment and sampling to inform development of an appropriate rehabilitation approach and design of field trials to demonstrate the success of proposed measures. [Trepca, Kosovo].
Samancor Manganese Mines	Project manager for development of conceptual closure plan and liability cost determinations for BHP Billitons operational Wessels and Mamatwan manganese mines and the decommissioned Hotazel, Smartt Rissik and Middelplaats manganese mines situated in the Kalahari desert system. [Hotazel, South Africa].
Stilfontein Gold Mine Tailings Dam Complex	Project manager for assessment of the closure and rehabilitation costs for the Stilfontein Gold Mine tailings dam complex. Conducted for Durban Roodepoort Deep. [Stilfontein, South Africa].
Marico Fluorspar Mine	Lead auditor during pre-acquisition audit and determination of closure and rehabilitation costs for the decommissioned Marico Fluorspar Mine. [Zeerust, South Africa].
Gallery Gold, Mupane Gold Mine	Project manager for rehabilitation and mine closure planning as part of the environmental impact assessment being carried out for Gallery Gold's Mupane Gold Mine. [Francistown, Botswana].
Steelpoort, South Africa	Project manager for closure planning for the Free State North 6 tailings dam and development and implementation of a post-rehabilitation monitoring programme for rehabilitated tailings dams in the region. [Welkom, South Africa].
Vantech	Project manager for development of a rehabilitation plan for combined mining areas and mining and industrial waste sites. [Steelpoort, South Africa].
Thesen Island Marina Development	Project manager during preparation of rehabilitation and planting plans for greenbelt, residential and estuarine areas of a marina under construction in the Knysna estuary. [Knysna, South Africa].
Iron Duke Gold Mine	Project manager for development of a rehabilitation plan for an iron sulphide waste rock dump at the Anglo American owned Iron Duke Gold Mine. [Zimbabwe].
Hartebeestfontein Gold Mine	Project manager and specialist ecologist for development of closure plan for Avgold's Hartebeestfontein No.7 slimes dam and implementation of subsequent post-rehabilitation biological monitoring. [Klerksdorp, South Africa].

Anglo Coal	Specialist rehabilitation planning, sourcing of materials for use in rehabilitation, monitoring of rehabilitated land and implementation and management of rehabilitation trials at a number of operational and closed mine sites. [Mpumalanga, South Africa].
Anglo Gold Ergo	Project manager during monitoring and reporting on performance of various grass covers on the Withok and Daggafontein gold tailings dams. [Johannesburg, South Africa].
De Beers, Premier Diamond Mine	Revegetation and ecological specialist to review performance of rehabilitation trials on fine kimberlite residues, and advise De Beers regarding future revegetation programmes. [Cullinan, South Africa].

#### **PROJECT EXPERIENCE – ENVIRONMENTAL AUDITS**

Government of Uganda, Environmental audit of Kasese Cobolt	Lead auditor for environmental compliance audit of Kasese Cobalt Company and development of environmental monitoring programmes [2005] Specialist ecological inputs to the decommissioning and closure plan for Kilembe Cobalt mine. [Uganda].
Kenor, Audit of SMD Gold Mining Operations	Project manager for development of environmental, social and health international best practice standards. Lead auditor for internal audit against these standards to inform development of detailed environmental, health and social action plans and subsequent annual performance auditing against implementation of action plans [2002/2003]. [Lero, Guinea].
Pre Acquisition audit, Iscor	Environmental auditor as part of a pre acquisition due diligence audit of Iscor Iron & Steels Sishen, Thabazimbi and Welgevonden Mines and review of closure cost provision prior to launching of Kumba Resources [2001]. [South Africa].
Idwala, Limpopo Province	Auditor of decommissioned industrial minerals mine as part of corporate environmental due diligence audit. [South Africa].
Anglo Coal South Africa	Environmental auditor of Anglo Coal mines as part of internal environmental audit teams as follows; New Vaal Colliery (1994, 1997), Goedehoop Colliery (1994), New Denmark Colliery (1995), Landau Colliery (1995), Kriel Colliery (1997) and Arnot Colliery (1997)
Maluti-A-Phofung Municipality	Project strategic guidance for compilation of a Status Quo report for the Platberg Nature Reserve to document the condition/status of the land under management, infrastructure and amenities [2002]. [Harrismith, South Africa].

#### PROJECT EXPERIENCE – ENVIRONMENTAL ASSESSMENT

Mayoko Iron ore Mine Mayoko, Republic of Congo	Project Director for opencast iron ore mine. The project components include rail upgrade, port refurbishment, opencast mine devleopment with supporting infrastructure. Permitting to IFC standards. Key issues include indigenous peoples and high biodiversitgy value, Republic of Congo.
Zambeze Coal Project, Rio Tinto Coal Mozambique	Project director for development of large-scale opencast coal mine including beneficiation plant and waste handling infrastructure. Unique project features include need to engage traditional communities, some of whom will require resettlement. Project is located in the Zambezi Valley, Tete Region, Mozambique.
Bakouma Uranium Mine, UraMin	ESIA project manager for large opencast Greenfields uranium development located in the east of the CAR. Project team is a multinational team comprised of Golder specialists worldwide and external consultants. Project includes development of opencast mine and associated infrastructure, concentrator, mine residue deposits and transport links to site. This is a current project for which we are busy executing baseline studies and initiating the public consultation programme, including liaison with government authorities and stakeholders. [Central African Republic].
Kembe Falls Hydroelectric Project, UraMin	Project lead for initial screening of a proposed hydroelectric dam and associated power generation infrastructure and transmission lines. Project is located in south central Central African Republic, with transmission lines linking to the regional capital Bangassou and to the Bakouma mine site. Project is in its early stages comprising prefeasibility screening and development of high level ESIA and baseline studies work plans. [Central African Republic].
Stiegler's Gorge Hydroelectric Project, Jeffares & Green	Project lead for prefeasibility screening of a proposed hydroelectric dam site located within the Selous Game Reserve, Tanzania. Project involves high level review of previous EIA and associated specialist work conducted during the 1980's and provision of strategic guidance regarding EIA requirements and work plan to developers investigating re-initiation of this project. [Tanzania].
Gold Mega Dam Project, Harmony	Project director for EIA/EMP for three Mega dams planned to receive tailings from the slimes dam reprocessing and re-treatment operations to be located in the Welkom, Randfontein and Leandra areas in the Free State, Gauteng and Mpumalanga provinces respectively. Key responsibility includes strategic advice and review to three independent EIA teams. [South Africa].
Waterberg Gas Project, Anglo Coal	Project lead for EIA and environmental permitting associated with development of the second five spot gas production well located in the Waterberg coalfield. [Limpopo Province, South Africa].
Heidelberg Underground Coal Mine, Anglo Coal	Project lead for EIA/EMP for proposed greenfields underground coal mine. Project is currently in the baseline studies phase. [Gauteng Province, South Africa].
Beira Port, Rio Doce Mozambique	Development of an environmental management plan for phase 1 dredging activities associated with developing coal export port at Beira.[Mozambique].

Namakwa Sands, Anglo Base Metals	Project manager for various projects including EIA/EMP for mine expansion, EIA/EMP for construction of a reverse osmosis water treatment plant at the mineral separation plant, annual performance assessment review audit and development of consolidated environmental management programmes for the mine site and mineral separation plant. [Western Cape Province, South Africa].
Benga Coal Mine, Riversdale	Project director for the environmental impact assessment for a proposed opencast coal mine and associated washing plant, residue disposal and linear infrastructure, Tete, Mozambique. The project includes an independent EIA process for development of a 400 MW coal-fired power station. [Mozambique].
Heidelberg Opencast Coal Mine, Anglo Coal	Project lead for EIA for proposed greenfields opencast coal mine, in a very sensitive environmental and stakeholder setting. [Gauteng Province, South Africa].
Greenfields coal mine, Anglo Coal	Project review and strategic guidance an Environmental Impact Assessment for Anglo Coals Mafube Macro opencast coal mine project. [Greenfields coal mine, Anglo Coal].
Greenfields Copper mine, First Quantum	Project manager for an environmental impact assessment for planned greenfields Frontier opencast copper mine and concentrator located in south eastern DRC. [Democratic Republic of Congo].
Environmental screening, Anglo Coal	Project manager for an environmental screening to identify potential fatal flaws and ascertain, in consultation with stakeholders, whether such issues can be mitigated, for a proposed opencast coal mine in a very sensitive setting. This work is carried out to inform a decision on whether the client should proceed with an EIA. [Gauteng Province, South Africa].
Expansion to Namakwa Sands Operations, Anglo	Project manager for Environmental Impact Assessment for planned expansion to mining and processing operations at Anglo's Namakwa Sands operation. Role in project is that of providing strategic direction and review. [Western Cape, South Africa].
New Tailings Dump at Venetia Mine, De Beers	Senior review of Environmental Impact Assessment for a new tailings residue facility at Venetia Mine. Project included land owner consultation, authority liaison, amendment of the environmental management plan and environmental input to the design. [Limpopo Province, South Africa].
New Tailings Dump at Finsch Mine, De Beers	Senior review of Environmental Impact Assessment for a new tailings residue facility at Finsch Mine. Project included land owner consultation, authority liaison, amendment of the environmental management plan and environmental input to the design. [Northern Cape, South Africa].
Coal Transport Infrastructure, Eskom	Project manager for Environmental Impact Assessment for rail or conveyor transport infrastructure to bring coal to Tutuka and Majuba power stations. Project included land owner consultation with owners of farms along almost 400 km of potential routes and final optimisation of the alignment of preferred routes across privately owned land. Also included were assessment of the sensitivity of various competing routes, route selection and development of environmental management plan for construction and operational phases of project. [Mpumalanga, South Africa].

Coal Transport Conveyor, BHP Billiton, Ingwe Coal	Project manager for environmental impact assessment for a 50 km long coal transport conveyor system for Ingwe Coal. The project entailed route selection and refinement, consultation with directly affected land owners and stakeholders and assessment of impacts of the proposed operation on the receiving environment. [Delmas, South Africa].
Letseng Diamonds	Project manager for Environmental Impact Statement and Environmental Management Plan for re-commissioning of diamond mining activities at a remote high altitude mine site in the Lesotho highlands. [Highlands, Lesotho].
BHP Billiton, Lwala Chromite Mine	Project manager for Environmental Impact Assessment and Environmental Management Plan for proposed opencast chrome mine. Project involved grassroots consultation and capacity building in rural communities. [Limpopo Province, South Africa].
Belulane Hazardous Waste Site	Specialist ecological and land rehabilitation review as part of an international team reviewing the Belulane hazardous waste site EIA under the auspices of the Netherlands Commission for EIA. [Maputo, Mozambique].
Rio Tinto	Sustainability Assessment Rossing Uranium Mine. Specialist contribution to assessment of impacts to the biophysical environment associated with various mine life extension scenarios, and evaluation of whether such activities contributed to sustainable development. [Swakopmund, Namibia].
Kumba Resources, Sishen South Iron Ore Mine	Project manager for environmental impact assessment for the proposed Sishen South opencast iron ore mine and development of EMP for mining operations. [Postmasburg, South Africa].
Angel Diamonds	Project manager for environmental assessment of a new mine in Lesotho. Development of a project brief and environmental management plan for proposed kimberlite bulk sampling activities, at a remote site in Lesotho. Project entailed site and project evaluation and grassroots engagement with local directly affected community. [Postmasburg, South Africa].
Manganese Metals Company	Compilation of a conceptual Environmental Management Plan for an industrial hazardous waste site. [Nelspruit, South Africa].
Anglo Coal, New Vaal Colliery	Project manager for environmental impact assessment of the planned 500 hectare opencast coal pit to mine the Maccauvlei West reserve area. This project comprised an extension of existing opencast operations. Particular sensitivities included the site being located directly opposite the towns of Vereeniging and Vanderbijlpark. The site is also located on the banks of the Vaal River. The project was reported as an addendum to the existing mine Environmental Management Programme Report. [Vereeniging, South Africa].
Anglo Coal, Greenside Colliery	Project manager for environmental assessment of planned mine life expansion project and development of an addendum to the mine Environmental Management Programme Report. [Witbank, South Africa].
Anglo Coal	Project manager for fatal flaw assessment of a proposed Greenfields opencast coal mine. Project involved consultation with key stakeholders/authorities and site assessment to identify potential fatal flaws and significant environmental and social issues to a project in a sensitive regional setting. [South Africa].

Anglo Coal	Project manager and biophysical environment specialist conducting screening of a proposed small opencast coal pit site to identify significant social and environmental issues and potential fatal flaws. [Mpumulanga, South Africa].
Assmang, Manganese Mines	Project manager and biophysical environment specialist conducting screening of a proposed small opencast coal pit site to identify significant social and environmental issues and potential fatal flaws. [Mpumulanga, South Africa].
Samancor	Botanical specialist and project manager responsible for development of an alien plant control plan for the Samancor, Meyerton Works industrial site. [Black Rock, South Africa].

Anglo Coal South Africa	While working with Anglo Coal, the following specialist work was undertaken and reported; Baseline ecological assessment prior to mining expansions at Kleinkopje Colliery;
	Baseline ecological assessment of the proposed Haasfontein mini pit site, Goedehoop Colliery;
	Baseline ecological assessment of proposed Block 11 shaft and overland conveyor, Goedehoop Colliery;
	Baseline ecological assessment of proposed Schoongesight mini pit site, Landau Colliery;
	Baseline ecological survey of proposed Eight Shaft borrow pits, Arnot Colliery;
	Baseline ecological survey of proposed Vlaklaagte shafts, mining sections and overland conveyor, Goodehoop Colliery;
	Soil survey of proposed Vlaklaagte shaft footprint and conveyor alignments, Goedehoop Colliery;
	Soil survey of proposed Block 11 shaft footprint and conveyor alignment, Goedehoop Colliery;
	Soil survey within footprint of proposed coal discard dump expansion, Goedehoop Colliery;
	Assessment of clean/dirty storm water drainage systems at various mines;
	Review of capacity of pollution control dams at select mines;
	Assessment of contaminated portions of Anglo Coals Natal Anthracite Colliery and Vryheid Coronation Colliery to inform rehabilitation and closure planning;
	Assessment of vegetation performance on rehabilitated opencast land and discard dumps;
	Post rehabilitation assessment of depth of soil placement on various rehabilitated dumps;
	Specifications for soil conditioning, revegetation and land maintenance of mine affected land;
	Reports on maintenance, development and performance of mined land rehabilitation trials.
BHP Billiton	Project manager and biophysical environment specialist for an environmental sensitivity assessment for forty three target prospecting sites in the arid Northern Cape ecosystem. [South Africa].

New Diamond Corporation, Crown Diamond Mine	Project manager for development of an Environmental Management Programme for the recovery of diamonds by re-treatment of old diamond bearing mine residue deposits. [Kroonstad, South Africa].
Anglo Coal	Project manager for development of an Environmental Management Programme Report for a greenfields opencast coal development at Kleinkopje Colliery. [Witbank, South Africa].
Mine Waste Solutions	Project manager for Environmental Management Programme Report for re- mining and processing of a gold slimes dam complex and associated conversion of old uranium plant to a Carbon in Leach (CIL) plant. [Stilfontein, South Africa].

#### **PROFESSIONAL AFFILIATIONS**

Certified Environmental Assessment Practitioner (EAPSA No. 0077/06)

Registered Professional Natural Scientist (Pr.Sci.Nat)

Society for Ecological Restoration

International Association of Impact Assessment (International, and South African Chapter)

#### PUBLICATIONS

Other

Baxter, BJM & Van Der Nest, L.J. (1999) The Economic Implications of Alternate Rehabilitation and Closure Strategies for Gold Tailings Dams. Tailings and Waste Disposal in Mining, AIC, 10-12 May 1999, Sandton

Baxter BJM (1998) Contract Mining and Responsible Environmental Management. Contract Mining in Africa: Summit 98, AIC, 13-14 May 1998, Fourways.

Baxter, BJM & Van Der Nest, LJ (1998) Rehabilitation of Gold Tailings for Closure - Achieving Effective Mine Closure, IBC 22-22 October 1998, Pretoria.

Baxter, B & Heydenrych, G (1998) Mine Closure and Decommissioning Plans: Practical Aspects. Mine Closure: IBC 24-25 February 1998, Pretoria

Baxter B.J.M., van Staden, J. and Granger J.E. (1995) Plant - derived smoke and seed germination: is all smoke good smoke? That is the burning question. South African Journal of Botany 61: 275-277.

Baxter B.J.M., van Staden, J. and Granger J.E. (1994) The growth responses of two ecotypes of Themeda triandra transplants along an altitudinal gradient in Natal: some preliminary results. Twenty-ninth Annual Meeting of the Grassland Society of Southern Africa, Harare, Zimbabwe.

Brown, N.A.C., de Lange, J.H., van Staden, J. and Baxter, B.J.M. (1994) Plantderived smoke: An important newly discovered natural cue for seed germination. Current Research and its Application to Australian Plant Species. Proceedings of Workshop 3: Revegetation of Mine Sites Using Appropriate Species. Third International Conference on Environmental Issues and Waste Management in Energy and Mineral Production, Curtin University of Technology, Perth, Western Australia: 69-73

Baxter B.J.M., van Staden J., Granger J.E. and Brown N.A.C. (1994) Plant - derived smoke and smoke extracts stimulate seed germination of the fire - climax grass Themeda triandra Forssk. Environmental and Experimental Botany 34(2): 217-223.

Baxter, B.J.M. and van Staden J. (1994) Plant - derived smoke: An effective seed pre-treatment. Plant Growth Regulation 14: 279-282.

Baxter B.J.M., Cuthbert, B., Granger J.E. & van Staden J. (1993) Viability of indigenous grass seed. Nineteenth Annual Congress of the South African Association of Botanists, Cape Town, South Africa.

Baxter B.J.M., van Staden J. and Granger J.E. (1993) Seed germination response to temperature in two altitudinally separate populations of the perennial grass Themeda triandra Forssk. South African Journal of Science 89: 141-144.

Baxter B.J.M., van Staden J. and Granger J.E. (1993) Technology to improve seed germination in the important indigenous grass Themeda triandra. Biotech SA '93, First South African Biotechnology Conference, Grahamstown, South Africa

Baxter B.J.M., van Staden J. and Granger J.E. (1993) Seed dormancy in the perennial grass Themeda triandra Forssk. Nineteenth Annual Congress of the South African Association of Botanists, Cape Town, South Africa.

Baxter, B.J.M. and van Staden, J (1993) Coat-imposed and embryo dormancy in Themeda triandra Forssk. Proceedings of the Fourth International Workshop on Seeds, Paris, vol. 2 pp 677-682.

Steenkamp, S.J, van Deventer P.W. & Baxter B.J.M. (2001) Gold Tailings – Turnkey Dry Land Rehabilitation. Chamber Of Mines Of South Africa, Conference On Environmentally Responsible Mining In Southern Africa, September 2001, Johannesburg.

Wates, J.A., Lorentz, S.A., Marais, H., Baxter, B.J.M., Theron, M. and Dollar, L. (2006) An evaluation of the performance and effectiveness of improved soil cover designs to limit through flow of water and ingress of air. Water Research Commission. (WRC Report No. 1350/1/06).

Witcomb, A, Baxter, BJM & Wates, J. (2001) The Transvaal & Delagoa Bay Colliery Rehabilitation Plan. Coal Indaba, Johannesburg, South Africa.

Witcomb, A. and Baxter, B.J.M. (2000) Abandoned coal mined land in South Africa. Mining Environmental Management.

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#### **Rob Rowles**

Principal Consultant, Earth & Environment



#### **CAREER SUMMARY**

Rob has been in the Environmental Consulting space for thirteen years and has been exposed to a wide range of roles and responsibilities within the ESIA field. He is currently a Principal Consultant within WSP's Earth & Environment team.

Rob has a Masters degree in Environmental Management and is a registered environmental assessment practitioner with EAPASA. Rob has 13 years of on-the-job management experience having completed numerous ESIA, EIA, EMP, WULA, Mine Closure, Public Participation Processes and ECO Due Diligence projects within South Africa. Rob has project experience with projects ranging from mining (ESIA and Operational Compliance), port developments, asphalt plants, pipelines, water supply schemes, roads (national and provincial), industrial developments, and public and private infrastructure projects.

#### <1 years with WSP

#### Area of expertise

Extensive experience in environmental impact assessment (Basic Assessment & Full Scoping EIA)

Extensive Environmental Construction and Operational Auditing (ECO and EO) experience against the requirements of EMPs and EAs.

Water Use Authorizations (Full WULAs and GA's)

Mining Permits, Mining Rights, and Mine Closure

Extensive experience in the compilation of site specific EMPs, Environmental Due Diligence and Feasibility Assessments and reports

Experience in leading Public Participation processes, presenting and reporting.

#### 13 years of experience

#### Language

English



#### UNIVERSITY OF JOHANNESBURG

The Council and the Senate of the UNIVERSITY OF JOHANNESBURG hereby certify that the degree

#### MAGISTER SCIENTIAE

with field of study

**Environmental Management** 

with all its associated rights and privileges in accordance with the Statute of the University has been conferred upon

#### ROBERT ARTHUR ROWLES

at a congregation of the University

Vice-Chancellor

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Registrar

04 OCTOBER 2012 Johannesburg ID 8409275061088



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Environmental Assessment Practitioners Association of South Africa

Registration No. 2022/5395

# Herewith certifies that

**Robert Arthur Rowles** 

## is registered as an

## **Environmental Assessment Practitioner**

Registered in accordance with the prescribed criteria of Regulation 15. (1) of the Section 24H Registration Authority Regulations (Regulation No. 849, Gazette No. 40154 of 22 July 2016, of the National Environmental Management Act (NEMA), Act No. 107 of 1998, as amended).

Effective: 01 March 2024

Expires: 28 February 2025





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